BRAVO!

Installation and Programming Manual

Mesures de Sécurité

Cet équipement est catalogué avec ETL et il est testé pour la sécurité; en plus il est certifié à ces standards: UL 1950, Troisième Édition, et CAN/CSA C22.2 No. 950, Troisième Édition. Pourtant, il faul que l'on qui qui révise cet équipement fasse attention à l'avertissement ci-dessous:

AVERTISSEMENT: Tout l'équipement doit être révisé par techniciens qualifiés. Il faut faire attention et bien assurer de mettre l'équipement à la terre avant de, et pendant, la réparation. Il n'y a pas de composants révisables dedans; donc, il ne faut pas démonter l'alimentation en électricité. Cet équipement est testé pour la sécurité; pourtant, s'il est revisé incorrectement il y aura la possibilité de la décharge électrique. Il faut aussi que le moniteur ne soit pas ouvert pour éviter le risque de la décharge électrique.

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Warning: This equipment has been certified to comply with the limits of a Class B computing device pursuant to Subpart J of Part 15 of FCC rules. Only peripherals (computer input/output devices, terminals, printers, etc., with shielded-type interface cables) certified to comply with Class B limits may be attached to this computer. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

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1. INTRODUCTION

BraVo!™ is a unique multilingual voicemail system designed specifically for small businesses. This compact, solid-state system incorporates leading edge technology, including digital signal processing (DSP) and flash memory, in an attractive case that can be mounted to your office wall quickly and effortlessly.

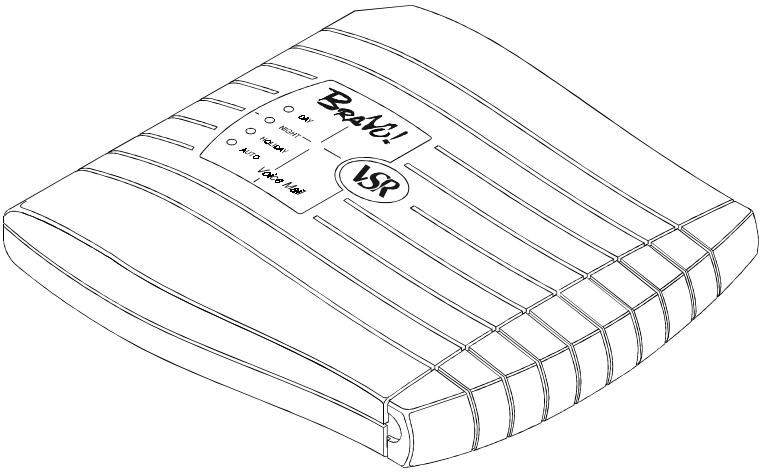


Figure 1-1: General View of BraVo! System

Available in two or four port versions, BraVo! is perfectly suited for small business applications. It supports up to 128 mailboxes and can be configured with 2 hours and 40 minutes, 5 hours and 20 minutes, or 8 hours of recording time.

Installation is simple. BraVo! integrates with most types of PBXs through the analog ports. Just mount it on a wall next to the PBX, connect it to the single-line telephone interfaces, and plug it into the main power supply with an external power adapter.

Once installed, program maintenance can be performed through two methods. The system administrator can program BraVo! via touch-tone telephone using DTMF tones, or via computer using the Voicemail Utility Program (VUP). The VUP is a flexible, Windows-based maintenance program designed to help you configure

your system operations with a minimal amount of interruption to online service. Using either programming method, the system administrator can define basic operational settings for integration, mailboxes, notification type, system schedules and opening greetings. Each mailbox owner can then set up his or her own personal mailbox options.

1.1 Overview

BraVo! offers many of the features provided by PC-based systems, but at a lower cost. These system features can be divided into three groups:

- System
- Automated Attendant
- Voice Mail

1.1.1 System Features

- **Configuration**

  Standard system configuration includes two ports and two hours and forty minutes of recording time. The system can be upgraded by doing one of the following:

  – Adding a two-port expansion card to increase the system to four ports;

  – Inserting a memory card with two hours and forty minutes of storage space to increase the total storage capacity to five hours and twenty minutes;

  – Inserting a memory card with five hours and twenty minutes of storage space to increase the total storage capacity to eight hours.

- **Programming**

  The system administrator can program BraVo! by two methods:

  – Touch-tone telephone, using DTMF tones;

  – Computer, using the VUP, a Windows-based maintenance program.

- **PBX Integration**

  BraVo! integrates with the PBX through the analog ports. In-band DTMF integration is achieved by determining the communication settings on the PBX, such as how the system should answer a call, transfer calls, respond to a busy, respond to a no answer, and other call processing issues.

- **Message Notification**

  BraVo! can automatically notify the mailbox owner of new messages in the following ways, according to system configuration: notification may be internal (to a PBX extension and message waiting lights) or external (to a telephone at a remote location, a cellular telephone, or a pager).

- **Security Passwords**

  BraVo! supports three types of passwords, each with four digits:

  – ***System Administrator***: Gives access to all data stored in the BraVo! system.

  – ***Operator***: Gives access to the operating modes (Day, Night, Break, Holiday and Auto).

  – ***Mailbox***: Gives access to individual mailboxes. The mailbox owner can change the password any time.

1.1.2 Automated Attendant Features

Similar to a switchboard operator or receptionist, the Automated Attendant can answer all incoming calls, or act as a back-up/over-flow operator through a series of recorded menu options. This will help callers reach their desired extensions.

Note: All menus must be recorded prior to using BraVo!

- **Operating Modes**

  Depending on the time and system schedule, BraVo! will answer calls with one of four greetings:

  – **Day Mode**

    During normal business hours, BraVo! answers calls with **your recorded** daytime greeting. The daytime greeting can inform

callers how to reach an extension, mailbox, department, or operator; or how to change to another language.

– **Night Mode**

  During non-working hours, BraVo! answers calls with **your recorded** nighttime greeting that enables the caller to leave a message in a requested mailbox, department, or with an operator; or informs the caller how to change to another language.

– **Holiday Mode**

  During holidays, BraVo! can answer calls with a special greeting that enables the caller to leave a message in a specific mailbox or in the operator's mailbox. The holiday mode can be activated by the operator (password protected). This mode is not automatic, but can be selected remotely, by telephone.

– **Break Mode**

  The system administrator can also program BraVo! to answer calls during office breaks. During these break times, BraVo! will play your recorded greeting that enables the caller to leave a message in a specific mailbox or in the operator's mailbox. This mode might be used as a back-up to live answer for lunch or other breaks.

- **System Schedules (Auto-Mode)**

  For organizations with operating hours that vary from day to day, the system administrator can define the daily operating schedules on a weekly basis, including daytime, nighttime and break time hours. When the Auto Mode is activated, BraVo! automatically switches between the Day, Night and Break Modes according to a pre-defined schedule.

  The operator can override the pre-defined system schedule and switch manually to Day, Night, Break, or Holiday Mode using a password.

- **Fax Detection**

  If BraVo! detects a fax tone (CNG) during the main greeting, it automatically transfers the call to the pre-defined fax extension.

- **Call Transfer**

  The system administrator can program BraVo! to detect the Call Progress tone and In-Band DTMF signals sent by the PBX and transfer the calls to extensions in one of the following modes:

  – **Blind Transfer:** In this mode, BraVo! transfers the call immediately without verifying the status of the extension.

  – **Full Supervision:** During a Full Supervision, BraVo! monitors the call's progress for busy or no answer conditions and only releases the call to the extension upon answer.

  – **Busy Supervision:** In this mode, BraVo! only monitors for a busy condition before transferring the call to a ringing extension.

- **Multilingual Option**

  BraVo! can operate in up to three languages simultaneously: English, Spanish, and French. Callers can be provided with options to select the particular language in which the system messages (prompts) are played. Additionally, the system administrator can configure individual mailboxes to operate in one of the three languages.

- **Answering on the First Ring**

  To avoid delays, the system administrator can set up BraVo! on each individual port to answer incoming calls on the first ring.

  Note: This is a default option, but for applications that don't provide access to hunt groups, BraVo! can be configured to delay the ring on a per port basis.

- **Menus**

  BraVo! supports up to 36 menus. A menu is a recorded announcement that provides callers with a list of options. Menus are activated by key press (0-9, *, #). Based on the key pressed, BraVo! can take one of the following actions:

  – Transfer the caller to another menu

  – Transfer the caller to another menu and change the language

  – Transfer the caller to an extension or hunt group

  – Transfer the caller to a mailbox or a distribution list

- Retrieve messages from a mailbox
- Disconnect the line

1.1.3 Voice Mail Features

The BraVo! Voice Mail system enables a caller to leave a message in a mailbox. Mailbox owners can access their mailboxes from any touch-tone telephone and retrieve their messages. In addition, users can also modify their own mailbox settings.

- **Real/Virtual Mailboxes**

  BraVo! supports up to 128 *real* or *virtual* mailboxes. A *real* mailbox is associated with a physical telephone extension. A *virtual* mailbox is not associated with a physical telephone extension.

- **Personalized Mailboxes**

  Each mailbox owner can personalize his/her mailbox by recording a name and personal greeting, assigning a personal password to the mailbox and setting notification settings.

- **Personal Greeting**

  Each mailbox owner can record or change his/her personal greeting at any time from any touch-tone telephone. Callers will first hear the personal greeting of the called extension and can then leave a message.

- **Day and Time Stamp**

  The system administrator can program BraVo! to automatically indicate, at the start of each message, the specific day and time at which the message was recorded.

- **Message Deletion**

  A mailbox owner can manually delete messages, or the system administrator can program BraVo! to automatically delete all messages after a specific number of days.

- **Copy Message**

  A mailbox owner can copy a message to another mailbox or distribution list. The mailbox owner can also record a comment, which

will precede the message.

- **Distribution Lists**

  A caller can send a message simultaneously to a group of mailboxes, called a Distribution list.

  An "All Mailboxes" distribution list containing every mailbox is automatically created. There are four additional distribution lists available, each containing up to twenty user programmable mailboxes. Mailboxes can belong to more than one list and can be added to or deleted from a distribution list by the system administrator.

- **Do Not Disturb (DND) Mode**

  Mailbox owners can set their mailboxes to Do Not Disturb (DND) mode. When a caller tries to reach a Do Not Disturb extension using the Automated Attendant menus, BraVo! plays a special "Do Not Disturb" menu and does not transfer the call to that extension.

- **Individual Language Selection**

  The mailbox owner or caller can select one of three languages from a menu supported by BraVo! When the mailbox owner or caller enters the mailbox, BraVo! automatically switches to the selected language.

- **Year 2000 Ready**

  BraVo! is century ready, assuring a consistent level of performance and function before, during, and after the year 2000.

1.2 About this Manual

This manual presents information required to install, program and maintain the BraVo! system. It is divided into the following sections:

INTRODUCTION
Introduces BraVo! and lists its features.

DESCRIPTION AND INSTALLATION
Provides a functional description, installation instructions and specifications.

PROGRAMMING BY TELEPHONE
Describes how to program BraVo! from any DTMF telephone.

PROGRAMMING BY COMPUTER
Describes how to program BraVo! using the VUP software.

PROGRAMMING IN-BAND INTEGRATION
Describes how to program BraVo! to detect the in-band DTMF protocol sent by the PBX using DTMF and the VUP.

USER OPERATING INSTRUCTIONS
Explains how to program and use a mailbox.

TROUBLESHOOTING
Presents answers to commonly asked questions about operating BraVo!

APPENDIX A
Summarizes the programming commands.

APPENDIX B
Contains the DTMF programming forms.

APPENDIX C

Lists the system messages.

2. DESCRIPTION AND INSTALLATION

BraVo! is a state-of-the-art digital system consisting of several components:

- A sophisticated Digital Signal Processing (DSP) device;
- Flash memory for voice recording and for storing PBX integration settings;
- A Central Processing Unit;
- Two or four audio channels;
- A real-time clock.

BraVo! provides two primary applications which integrate together with your telephone system to provide a complete voice processing solution for your business:

- **Automated Attendant**

  Provides unattended call answering and routing by using predefined menus to direct calls to specific departments, extensions, mailboxes or menus.

- **Voice Mail**

  Provides a secure messaging system for internal and external business communication. The voicemail process allows users to send, receive, save, delete or copy messages to other mailboxes. Mailbox owners can also send messages to distribution lists.

You can customize these Automated Attendant and Voice Mail applications to suit your specific requirements. As system manager, you can configure options such as:

- Valid extension range
- Automated Attendant menu prompts and customized “Busy”, “No Answer” and “Do Not Disturb” menus in up to three different languages
- Voicemail features, including the number of voice mailboxes, number of distribution lists, and type of new message notification for each mailbox.

2.1 Base System

BraVo! comes with two lines and two hours and forty minutes of recording time. You can upgrade the basic configuration by several methods:

- Adding a two-line expansion card to the motherboard to provide four lines;
- Inserting a memory card with two hours and forty minutes of storage space to increase the total storage capacity to five hours and twenty minutes;
- Inserting a memory card with five hours and twenty minutes of storage space to increase the total storage capacity to eight hours

Please note that any of these upgrade options can be factory installed prior to shipment.

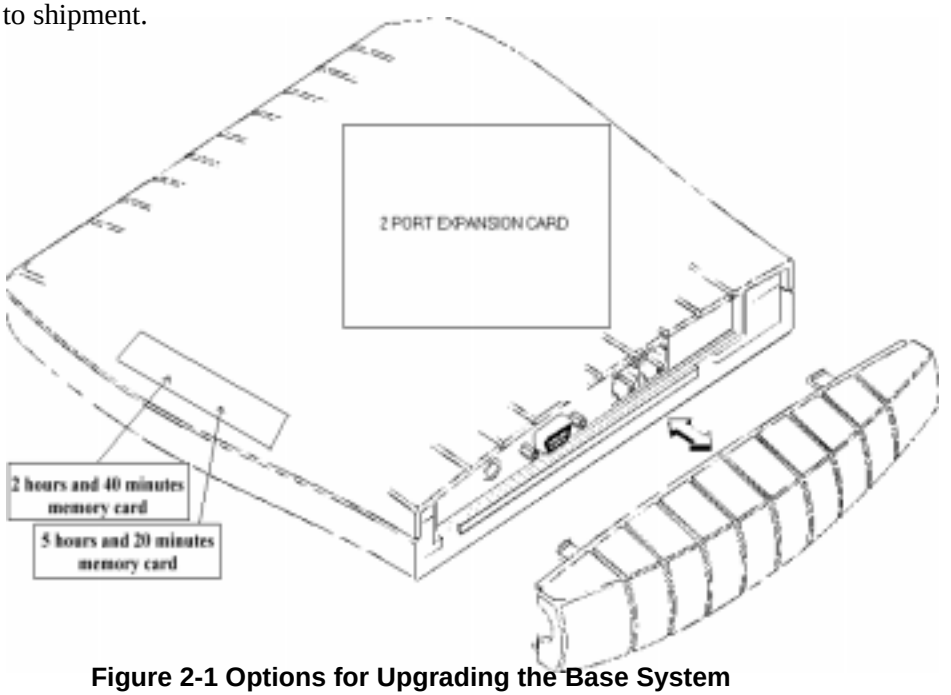


Figure 2-1 Options for Upgrading the Base System

2.2 Physical Description

The functional components of BraVo! are located under the right side panel cover. The LEDs are on the left side of the front panel. The back panel has two indented holes for wall mounting.

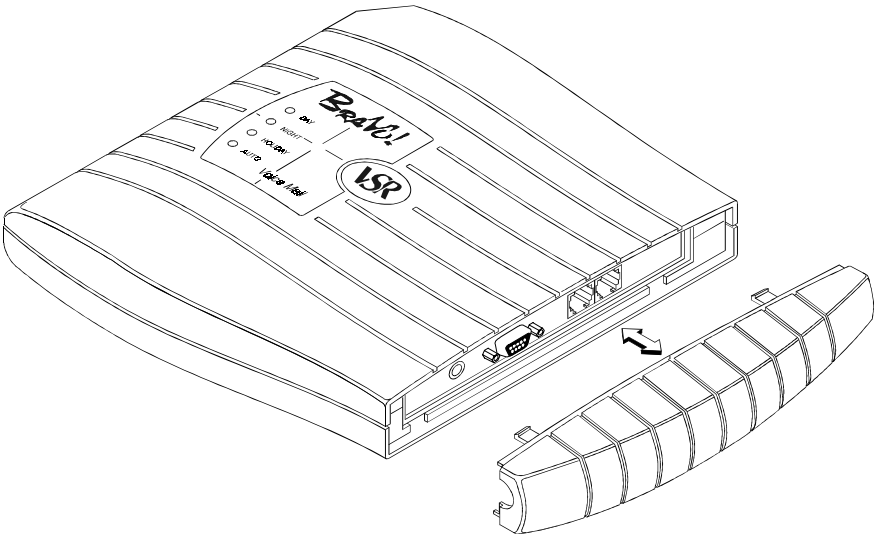


Figure 2-2 General View of BraVo! after Removing the Cover

2.2.1 Side Panel

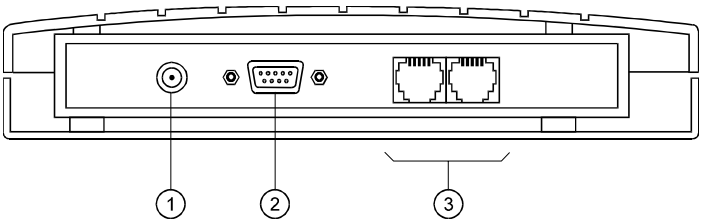


Figure 2-3 Side Panel

The numbered items in the following description correspond to the labels in Figure 2-3.

1.	Power Supply Connector	Connects BraVo! to the external power supply
2.	RS-232 Connector (DB9)	Connects BraVo! to the PC serial port
3.	2 RJ-14 Jacks	Connects BraVo! to 2 or 4 PBX extensions

2.2.2 Front Panel

Figure 2-4 LEDs on the Front Panel

The following table describes the function of the four LEDS on the front panel.

STATUS	DAY	NIGHT	HOLIDAY	AUTO
Day Mode: Manual	On	Off	Off	Off
Night Mode: Manual	Off	On	Off	Off
Holiday Mode: Manual	Off	Off	On	Off
Day Mode: Auto	On	Off	Off	On
Night Mode: Auto	Off	On	Off	On
Break Mode: Auto	On	On	Off	On
System Error[1]	Off	Flashing	Off	Off
System Error[1]	Flashing	Flashing	Flashing	Flashing
System Error[1]	Flashing	Flashing	Flashing	Off
Automatic Self-Test	On	On	On	On

[1] Please contact your local dealer.

2.3 Installation

BraVo! is delivered fully assembled. It is specifically designed for mounting on a wall near the PBX.

2.3.1 Unpacking

Before unpacking, inspect the package. If you notice any damage, immediately report it to your local dealer, or to whomever you purchased the system from.

To unpack BraVo!:

Place the package on a flat surface and open it.

Remove the contents of the package and place them on a clean surface.

Remove all packing material.

Inspect the contents. If you notice any physical damage, immediately report it to your dealer.

2.3.2 Installing BraVo!

To install BraVo!:

Mount the unit on a wall close to the PBX. Use the provided drill template to mount the two screws (not provided).

Remove the side panel cover.

Connect a 4-conductor line cord to one of the RJ-14 jacks on the BraVo! side panel. Connect the other end of the line cord to the installed RJ-14 jack. Repeat procedure for the second jack. (See Figure 2-5).

Note: Each RJ-14 jack on the side panel of BraVo! can support up to two analog telephone lines. The first jack connects to Lines 1 and 3, and the second jack connects to Lines 2 and 4.

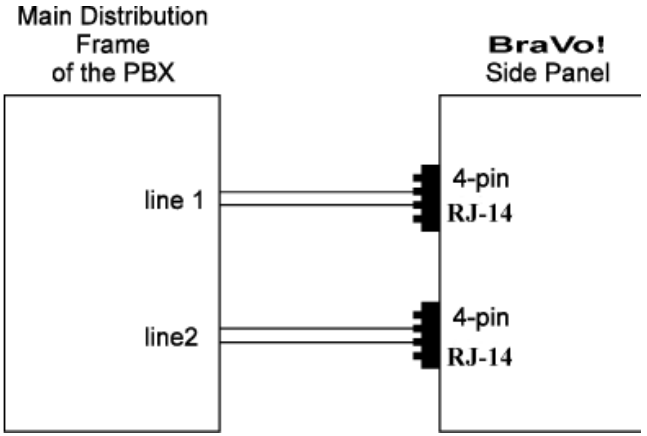


Figure 2-5a Analog 2-Line Connection

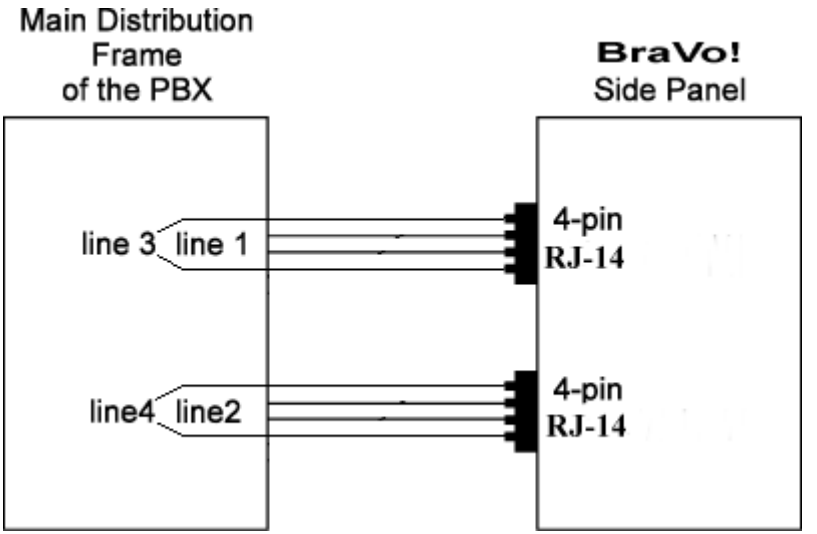


Figure 2-6b Analog 4-Line Connection

4. On the side panel of the BraVo! unit, plug the 9 V dc adapter jack into the power supply connector.
5. Plug the 9 V dc adapter into the main power supply outlet to turn BraVo! on. The LEDs on the front panel will cycle through a diagnostic routine. When completed, the mode of operation will be indicated by the corresponding LED. (see page 2-5 for LED description)
6. Call each line on BraVo! to verify that it answers. You should hear the default prompt (System Prompt No. 000; See Appendix C).
7. Replace the side panel cover.
8. Program BraVo! according to the type of PBX installed and the required applications. (See programming chapters 3 or 4.)

2.3.3 Expanding the System

The basic BraVo! system includes two lines and two hours and forty minutes of recording time. You can expand BraVo! to four lines and up to eight hours of recording time by adding expansion cards.

2.3.3.1 Expanding to Four Lines

The two-line expansion kit contains the following components:

- 2-line expansion card;
- 4-wire cable;
- Two plastic spacers.

To install the expansion card:

1. Disconnect all line cords.
2. Disconnect the 9V dc adapter power plug.
3. Remove the front cover of BraVo! by unscrewing the four screws.
4. Place the two plastic spacers into the corresponding holes.
5. Insert the expansion card into the corresponding J6 connector.
6. Connect one end of the 4-wire cable to J5 on the motherboard and the other end to J5 on the expansion card.
7. Replace the front panel cover 4 screws, and plug in the 9V dc adapter.
8. Reconnect all the line cords, and powercord to BraVo!

BraVo! automatically detects the addition of two new ports upon power up.

2.3.3.2 Expanding Flash Memory

BraVo! has two types of expansion memory cards:

- Two hours and forty minute card with 2 memory chips
- Five hours and twenty minute card with 4 memory chips.

➢ **To install the memory expansion card:**

1. Disconnect all line cords and cables.
2. Disconnect the 9V dc adapter power plug.
3. Remove the front cover of BraVo! by unscrewing the four screws.
4. Insert the memory card into the SIMM connector.
5. Replace the front panel cover 4 screws, and plug in the 9V DC adapter.
6. Reconnect all the line cords, and powercord.

BraVo! automatically detects increased storage capacity upon power up.

2.4 Specifications

DC Power Supply	9V dc/800 mA
Line Voltage	24 to 72 V DC
DC Leakage Current	< 10 μA
On-hook Insulation Resistance between Line Terminal and the Ground	0 to 100 V DC > 5 MΩ 100 to 200 V DC > 30 KΩ 500 Vac/50 Hz > 20 KΩ 100 Vac/25 Hz > 100 KΩ
Ring Capacitor	0.47 μF ± 10%
On-hook Impedance	@ 50 V DC, 40 Vac/25 Hz > 3000 Ω
Ring Detect	27 to 100 Vac/16 to 60 Hz
DC Resistance (off-hook)	24 to 66 V DC @ 20 to 100 mA 100 to 350 Ω
Impedance (off-hook)	300 to 3400 Hz 500 to 700 Ω
Imbalance Ratio	300 to 3400 Hz > 46 db
Return Loss	300 to 3400 Hz > 18 db

Current during Break	< 700 µA
DTMF Transmission: **Frequency Tolerance** **Frequency Level (High Group)** **Frequency Level (Low Group)**	 +1.5% -6 to -8 dBm -8 to -10 dBm
Inter-digit Pause in Tone Dialing	70 to 80 ms
Fax CNG Tone Detection	1100 Hz ± 38 Hz

3. PROGRAMMING BRAVO! BY TELEPHONE

You can program BraVo! via a touch-tone telephone using DTMF tones or via computer using the VUP.

This chapter describes how to program BraVo! from a telephone using DTMF tones. To program BraVo! using the VUP, refer to Chapter 4.

3.1 Entering and Exiting the Programming Mode

BraVo! does not process calls when engaged in the programming mode.

➤ To enter the programming mode:

1. Connect a PBX analog line to BraVo!.
2. Call the PBX analog line from any touch-tone telephone.
3. Wait until BraVo! answers and plays the Intro Greeting. Then, enter *900.
4. Enter the system administrator's password (the default password is 1234); you will hear a confirmation tone. You are now in the programming mode.

➤ To exit the programming mode:

1. Enter *900.
   –or–
   After one minute, BraVo! will exit the programming mode automatically.

Note: If you exited the programming mode by entering *900, BraVo! will play the Greeting. You can then test the changes made to the system and the system will process calls as usual.

3.2 First Time Programming Checklist

1. Call BraVo! from a touch-tone telephone. You will hear the default message (System Prompt 000 - see Appendix C).
2. Enter *900 and the administrator password (default: 1234) to enter the programming mode.
3. Set the PBX settings (see Sections 3.3 and 6) to ensure the proper integration with the PBX.

Note: You will hear a confirmation tone every time you enter programming commands successfully.

4. Set BraVo!'s real-time clock (see Section 3.4).
5. Set the system schedule (see Section 0).
6. Create mailboxes (see Section 3.6.1).
7. Define a notification type for each mailbox (see Section 0).
8. Define notification settings (i.e., message light on codes, message light off codes, and interval between ring notification in Section 0.)
9. Record (see Section 3.7.1) and program (see Section 3.7.2) menu prompts for the Automated Attendant. Make sure you define the mailboxes before building Automated Attendant menus.

Important: Make sure you record the Greeting (Prompt 00) before using BraVo! for the first time.

3.3 Defining PBX Settings

To integrate BraVo! with your PBX, you will need to program BraVo! with the specific PBX settings. (For the appropriate PBX settings, check the current PBX setup configuration). Reference your PBX User's Manual, or use the PBX settings listed in the VUP.

To configure BraVo! to detect the In-Band DTMF digits from the PBX, refer to Section 6.

Note: The PBX codes for Set Msg Wait Lamp Code 1, Set Msg Wait Lamp Code 2 and Message Light Off can also include A-D.

When entering a code, press:

*0	for extension	*5	for A
*1	for pause	*6	for B
*2	for Flash-1	*7	for C
*3	for Flash-2	*8	for D
*4	for #	**	for *

Table 3-1 presents the commands you must enter to apply the PBX settings to BraVo!

Table 3-1 Commands for PBX Settings

OPERATION	COMMAND	DEFAULT
Extension Size	***300 + X** where X is a digit 1-4	3
Number of Rings before Answer	***310 + X+Y** where X is the line number (1-4) Y is the number of rings (1-9)	1 for all lines
Time to Wait for No Answer	***311 + XX** where XX is 00-99 seconds. This code is applicable only when Full Supervision transfer is selected.	20 seconds
Valid PBX Extensions	***320 + Y + First Ext. + Last Ext. + #** where Y is a group number (0-4). Example: *320 0 330 350 # *320 1 455 475 # You can define up to 5 groups of valid extensions. If a caller enters an extension by direct dialing BraVo! checks if the extension is valid. If the extension is not valid, BraVo! will not transfer the call.	None

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number.

Table 3-1 Commands for PBX Settings (continued)

OPERATION	COMMAND	DEFAULT
Resetting a Group of Extensions	***320 + Y + 000 + 000 +#** (the two groups of zeros can be 2, 3, or 4 digits long, according to the extension size)	None
Resetting All Extensions	*320 + # *Note: Will erase all extensions*	None
Default Operator Menu Key	***330 + X** where X is a digit 0-9 When the caller presses this key during *any* menu prompt, the call is transferred to the operator.	0
External Access Code	***340 + X** where X is the external access code (0-9). This code is applicable for external notification.	9
Day Operator Extension	***360 + Ext. + #** BraVo! transfers the call to this extension when a caller enters the default operator menu key during Day mode.	0
Night Operator Extension	***361 + Ext. + #** BraVo! transfers the call to this extension when a caller enters the default operator menu key during Night, Break or Holiday modes.	None
Fax Extension **To Cancel**	***362 + Ext. + #** BraVo! transfers the call to this extension if it detects fax tone during the intro greeting. ***362 + #**	None
Flash-1	***370 + XXX** where XXX is a 3-digit number (000-980) in increments of 20 ms. Example: *370 300 sets Flash-1 to 300 ms	600 ms

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

Table 3-1 Commands for PBX Settings (continued)

OPERATION	COMMAND	DEFAULT
Busy Off-Time **Busy On-Time**	***371 + XXX** ***372 + XXX** where XXX is a 3 digit number (000-980) in steps of 20 ms. Refer to PBX manual for details.	500 ms 500 ms
Disconnect Off-Time **Disconnect On-Time**	***373 + XXX** ***374 + XXX** where XXX is a 3 digit number (000-980) in increments of 20 ms. These numbers define the disconnect cadence. If BraVo! detects this tone, it disconnects the call.	240 ms 240 ms
Busy Signal Cadence Check	***375 + XXXX + #** where XXXX is a busy extension number. BraVo! checks a busy signal by dialing the busy extension number and learning the busy cadence values. (for extensions)	
Voice Sensitivity	***376 + X** where X is the sensitivity level (1-9). The level at which BraVo! detects voice when the called extension answers. *Note: The higher the value, the higher the sensitivity to voice. You should not need to modify this setting.*	5
Set Msg Lamp Code 1 **To Cancel**	***380 + CODE**[1] **+ #** This is the code required to turn on the message light of an extension that has a new message. ***380 + #**	None

[1] Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

Table 3-1 Commands for PBX Settings (continued)

OPERATION	COMMAND	DEFAULT
Set Msg Lamp Code 2 **To Cancel**	***381 + CODE**[1] **+ #** Used in PBXs that have two types of message lights. Turns on the message light of an extension that has a new message. ***381 + #**	None
Clear Msg Wait Lamp Code **To Cancel**	***382 + CODE**[1] **+ #** Turns off the message light after the mailbox owner listens to all messages. ***382 + #**	None
Transfer	***390 + CODE**[1] **+ #** Used to define the transfer process on the PBX. Example 1: *390 *2 *0 #. Performs a Hook-Flash-1 and sends the digits of the requested extension. Example 2: *390 *2 20 *0 # Performs a Flash-1, enters prefix digits 20 and then enters the requested extension.	Flash-1 + Ext.
Abort a Busy	***391 + CODE**[1] **+ #** Performs an abort a busy when the called extension is busy. Applicable in Full Supervision and Busy Supervision modes.	Flash-1
Abort a No-Answer	***392 + CODE**[1] **+ #** Performs an abort a no answer when the called extension does not answer. Applicable in Full Supervision mode.	Flash-1
Disconnect Code	***333+CODE + #** BraVo! terminates a call when it receives the disconnection code. The code can include up to four digits. Legal values for this code can be any combination of 0-9, *, #, and A-D.	###

[1] Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number.

3.4 Setting the Time and Date

Table 3-2 Commands to Set the BraVo! Clock and Calendar

OPERATION	COMMAND
Setting the time and day of the week	***420 + D+HH+MM** where D = day of the week (1-7) HH = hour (00-23) MM = minutes (00-59) Example: *420 1 15 25 stands for Monday 3:25 p.m. *Note: Day 1 is Monday.*
Setting the date	***430 + DD + MM +YY** where DD = date of the month (01-31) MM = month (01-12) YY = year (00-99) Example: *430 15 03 97 March 15, 1997 *Note: Year 2000 is represented by 00.*
Listening to the system time	***440** BraVo! announces the date & time.

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number.

3.5 Programming the Operational Mode

BraVo! can operate in Day, Night, Break, or Holiday mode. If BraVo! is in the Auto mode, it automatically changes modes according to pre-programmed weekly working hours.

In Auto mode, the BraVo! automatically switches to the Break mode, if it has been scheduled. Menu Number 15 is the main greeting for the Break mode. A new menu can be created for this mode. Note: Menu Prompt 15 must be recorded prior to implementation.

Table 3-3 Programming the Operational Modes

OPERATION	COMMAND
Selecting an Operational Mode	***400 + X** where X stands for the operational mode. Day mode = 0 (default mode) Night mode = 1 Holiday mode = 2 Auto mode = 3 Break mode = 4
Selecting Time Stamp Format (Applicable to English only)	***410 + X** where X = 0 means the time stamp is in 12-hour format (default) X = 1 means the time stamp is in 24-hr format
Setting the Working Time (for Auto mode only)	***450 + D + HH MM + HH MM** where D is the day of the week (1-7)[1] First HH MM = start of work time Second HH MM = end of work time Repeat for all days of the week. Example: *450 1 08 30 1700 means that BraVo! will play the Day mode intro greeting (Menu Prompt 00) on Monday from 8:30 until 17:00 (5:00 p.m.) . It will play the Night mode intro greeting (Menu Prompt 10) the rest of the time. *Note: Day 1 is Monday.*
Setting the Break Time (for Auto mode only)	***460 + D + HH MM + HH MM** where D is the day of the week (1-7)[1] First HH MM = start of break time Second HH MM = end of break time Repeat for all days of the week. Example 1: *460 1 13 15 14 30 BraVo! will play the Break mode intro greeting (Menu Prompt 15) on Monday, from 13:15 (1:15 p.m.) to 14:30 (2:30 p.m.). *Note: Day 1 is Monday.*

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash 1, Pause and Extension

3.6 Programming the Voice Mail

3.6.1 Creating Mailboxes

Up to 128 mailboxes can be created in BraVo! Please note that the mailbox number and its extension number are the same; therefore the mailbox and extension digit length must be identical when programmed.

You can select one of the languages supported by the BraVo! for each mailbox. After selecting a language, BraVo!:

- Plays all user menus in the selected language.
- Plays all system prompts (e.g., time stamp and error messages) in the selected message.
- If ring or external notification is enabled, notifies the mailbox owner in the selected language.

You can also create a virtual mailbox for a user who does not have an extension. When a caller enters a virtual mailbox number from the Automated Attendant menu, the call is immediately transferred to the Do Not Disturb (DND) menu and the caller is given the option to leave a message. You may use the external notification features for the virtual mailboxes. Do not select internal notification because virtual mailboxes do not have extensions.

3.6.2 Table 3-4 Commands to Create Mailboxes

OPERATION	COMMAND
Creating a range of mailboxes	***500 + First Mailbox + Last Mailbox + #**
Creating one mailbox	***501 + Mailbox Number + #**
Deleting a mailbox	***510 + Mailbox Number + #** Make sure to remove any references to the deleted mailbox from the Automated Attendant menus.
Creating a range of virtual mailboxes	***520 + First Mailbox + Last Mailbox + #**
Creating one virtual mailbox	***521 + Mailbox Number + #**
Defining whether to play or skip the time and date stamp during message playback for a range of mailboxes	***530 + First Mailbox + Last Mailbox + B + #** where B = 0; Play the date and time stamp (default) B = 1; Do not play the date and time stamp
Defining whether to play or skip the time and date stamp during message playback for one mailbox	***531 + Mailbox Number + B + #** where B = 0; Play the date and time stamp (default) B = 1; Do not play the date and time stamp
Defining a language for a range of mailboxes	***532 + First Mailbox + Last Mailbox + Z + #** where Z = 0, 1 or 2 (language number)
Defining a language for a mailbox	***533 + Mailbox Number + Z + #** where Z = 0, 1 or 2 (language number)

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

3.6.3 Creating Distribution Lists

BraVo! supports up to four distribution lists, plus a system wide distribution list, which allow you to send voicemail messages to a group of mailboxes. System wide distribution list (List 099) includes all of the mailboxes, real and virtual, programmed on the system, while the remaining four lists may be individually assembled. Each distribution list can contain up to twenty mailboxes.

The distribution lists are numbered by default as 000, 001, 002, 003 and 099. However, the first digit of the distribution lists can be programmed for any digit (0-9) using Code *545. ***Make sure that you select a number that does not conflict with your PBX's numbering plan, i.e., if your extensions start with 3, make the distribution lists start with 7.***

Table 3-5 Commands to Create Distribution Lists

OPERATION	COMMAND
Adding a mailbox to a distribution list	***540 + List Number + Mailbox Number + #** *Note: You must create the mailbox before adding it to a distribution list.*
Changing the first digit of the distribution lists	***545 + X** where X is the first digit of the distribution lists. Default is 0.
Deleting a mailbox from a distribution list	***550 + List Number+ Mailbox Number + #**
Resetting a distribution list	***560 + List Number + #** *Note: Resetting a distribution list deletes all the mailboxes within that list.*

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

3.6.4 Notification

BraVo! can notify users when they have new messages in their mailbox by lighting the message waiting lamp, ringing the extension, or calling/paging them at a remote location.

> Notification is *always done on the second line*.

Internal Notification

Note: Virtual mailboxes do not have extensions and may not be configured for internal notification.

You can select one of the following options:

- ***None***: The notification feature is disabled.
- ***Set Msg Wait Lamp Code 1***: BraVo! signals the PBX that a mailbox has received the first message. The PBX then activates the message light on the telephone. If the *Clear Message Waiting Lamp* code is programmed, BraVo! signals the PBX to extinguish the message light on that specific telephone when the message has been retrieved.

  Some PBXs do not support the Clear Message Waiting Lamp code. Instead, the message light turns off when the mailbox owner presses the message button on his/her proprietary telephone set and BraVo! starts playing the messages.
- ***Set Msg Wait Lamp Code 2***: Same as *Set Msg Wait Lamp Code 1*, but used for PBXs that have two different codes for different telephones or for special tone notification (see Table 3-1). Note: only 1 off code is available.
- ***Distinctive* Rings**: BraVo! rings the telephone. BraVo! can also be programmed to ring the telephone at programmed intervals (Code *720). BraVo! stops ringing the telephone after the mailbox owner retrieves all new messages or the maximum number of retries has been exceeded (Code *750).

- ***Internal Notification***: BraVo! rings the telephone for a programmed time period (Code *730). When the mailbox owner answers, BraVo! prompts him/her to enter a password. After entering the password, the mailbox owner may retrieve messages. If the mailbox owner does not answer, BraVo! retries at programmed intervals (Code *720). BraVo! stops its notification attempts after the mailbox owner retrieves all new messages or the maximum number of retries has been exceeded (code *750).

External Notification

BraVo! also offers external message notification for remote locations (i.e., cellular, pager, or home telephone number) by entering a pre-programmed number of up to 20 digits for telephone numbers and 40 digits for pager numbers. Any combination of *, #, A-D, 0-9, and "P" for Pause can be used for programming notification numbers.

When permission has been granted for external notification, the mailbox owner can program and enable telephone/pager notification from his/her own mailbox.

If external notification is programmed and enabled, BraVo! will call the remote telephone number and prompt the user to enter his/her password. After entering the password, the mailbox owner can retrieve messages. External Ring Duration (i.e., the period of time that BraVo! will continue ringing the external telephone number) is programmed using Code *730. The Ring Notification Interval, or the amount of time between notification attempts, can be defined by Code *720.

BraVo! stops notification after the mailbox owner retrieves all new messages, or the maximum number of retries has been exceeded (Code *750). The system administrator must enable external notification. Code *711 or *710, provided by the system administrator, grants permission for external notification for either one mailbox or a range of mailboxes, respectively.

When permission has been granted and the mailbox owner enables external notification, BraVo! first dials the external access digit (programmed using code *340) and then dials the mailbox owner's remote telephone and/or pager number.

Note: Make sure that you enter the remote telephone number before enabling external notification.

Again, notification is *always done on the second line*.

3.6.4.1 Setting Mailbox Notification

Table 3-6 Commands to Program Notification for Mailboxes

OPERATION	COMMAND
Configuring internal notification for a range of mailboxes	***700 +First Mailbox + Last Mailbox + X+#** where X = 0 means notification is disabled X = 1 means Set Msg Wait Lamp Code 1 is selected X = 2 means Set Msg Wait Lamp Code 2 is selected X = 3 means Ring Signs is selected X = 4 means Rings is selected
Configuring internal notification for one mailbox	***701 + Mailbox + X + #** where X is defined as above
Configuring external notification for a range of mailboxes	***710 + First Mailbox + Last Mailbox + Y + #** where Y = 0 means remote notification is not permitted Y =1 means remote notification is permitted
Configuring external notification for one mailbox	***711 + Mailbox + Y + #** where Y is defined as above

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

OPERATION	COMMAND
Wait Between Retries	***720 + XX** where XX is a 2 digit number in minutes. Default is 30 minutes.
Ring Notification Duration	***730 + X** where X = 0 stands for 10 second ring period (short ring) X = 1 stands for 20 seconds ring period (long ring)
Retries	***750 + XX** where XX refers to the number of ring notification attempts. Default is 05 valid range 0-99.

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

3.7 Programming the Automated Attendant Menu

BraVo! supports up to 36 menus (00-20). It also supports, in three simultaneous languages, another five menu prompts (21-25 for the first language, 31-35 for the second and 41-45 for the third) for Busy, No Answer and Do Not Disturb menus (see Section 3.7.4).

The following numbers are dedicated to specific system menus:

- Menu Number 00 is assigned to the Day Mode
- Menu Number 10 is assigned to the Night Mode
- Menu Number 15 is assigned to the Break Mode
- Menu Number 20 is assigned to the Holiday Mode

The remaining menus (01-09, 11-14 and 16-19) may be used in all modes without limitations.

Each menu has three parts:

- Menu Number;
- Menu Prompt, i.e., the recorded announcement; associated with the menu
- Menu Key Assignments—programming function that defines the action BraVo! should take when a caller does not respond or responds by entering one digit (0-9) after the menu announcement.

Prior to recording menu prompts and programming new key assignments, the system administrator or technician should carefully format the contents and flow of each menu in detail, according to the specific application. Otherwise, they may not perform as expected.

3.7.1 Recording Menu Prompts

Recording menu prompts is a quick and easy process. Table 3-7 describes the three simple commands you need to use to record, play back, and delete menu prompts.

Important: You must record Menu Prompt 00 for BraVo! to operate properly. Only available via DTMF Programming.

Table 3-7 Commands for Recording Menu Prompts

OPERATION	COMMAND
Record a menu prompt	***100 + XX + Beep + Record + #**
Playback a menu prompt	***101+XX**
Delete a menu prompt	***102+XX**

Note: XX are menu prompts 00-25, 31-35 and 41-45.

3.7.2 Programming Menus

Each menu can be programmed separately for different functionality. For optimal performance, carefully plan your menu flow according to the specific application (see appendix B, Page B-4 for forms).

The programming command format for menu prompts is:
**** + Menu Key Assignment + XX + B + YY + #***

- **Assignment** defines the action that should be taken when B is pressed during playback of menu XX.
- **XX** refers to one of 36 menu numbers.
- **B** refers to the digit entered by the caller during playback of menu prompt XX or at the end of the prompt. B can be 0-9 or * (for end of message).
- **YY** refers to the destination, which can be an extension, mailbox or another menu.

IMPORTANT: Do not define the Operator extension on menus. Table 3-1 describes how to define the default operator menu key which is then automatically reserved on all menus.

The menu key assignments used to build the Menu are presented on the following pages. You can program one of the following actions for each menu key:

- Play another menu
- Return to the opening menu
- Play another menu and change the language
- Transfer the caller to an extension
- Transfer the caller to the operator
- Transfer the caller to a mailbox
- Disconnect the line
- Leave a message in a mailbox
- Retrieve messages from a mailbox
- Directly dial an extension
- Directly transfer a call to a mailbox

3.7.2.1 Transfer to another menu

You can also build submenus that transfer the caller from one menu to another.

Command: ***110 + XX + B + YY + #**

Example: *110 00 3 02 #

BraVo! plays Menu Prompt 02 when key 3 is pressed during Menu 00.

Note: Be sure to record Menu Prompt 02.

3.7.2.2 Return to Intro Greeting

This menu key assignment returns the caller back to the Intro Greeting. It is typically used in conjunction with Busy and No-Answer menu prompts (21-24 for the first language, 31-34 for the second language and 41-44 for the third language), which provide the caller with the option to return to the Intro Greeting. The caller is transferred to Menu 00 in Day Mode, Menu 10 in Night Mode, Menu 15 in Break Mode and Menu 20 in Holiday Mode.

Command: ***115 + XX + B #**

Example: *115 21 5 #

BraVo! plays the Intro Greeting when "5" is pressed during Menu 21.

3.7.2.3 Change to Another Menu and Change the Language

You can program BraVo! to change the system language and change to another menu. BraVo! currently supports up to three different system languages simultaneously: English, Spanish, and French.

Command: ***117 + XX + B + YY + Z +#**

where:

XX refers to the current menu

B refers to the digit entered by the caller during playback of menu XX

YY refers to the destination menu

Z refers to the system language digit (0, 1 or 2)

Example: *117 00 7 01 2 #

BraVo! changes to the third language (digit 2) and plays Menu 01 when "7" is pressed during playback of Menu 00.

Note: Make sure that Menu Prompt 01 has been recorded in the appropriate language.

3.7.2.4 Transfer Direct to Extension

This menu key assignment transfers the caller directly to an extension or department (hunt group).

The designated extension number may contain up to 4 digits and does not have to be in the range of actual extensions.

Command: ***120 + XX + B + extension number + #**

Example 1: *120 05 3 123#

BraVo! transfers the call to extension 123 when "3" is pressed during playback of Menu 05.

Example 2: *120 00 * 1000 #

BraVo! transfers the call to hunt group 1000 when Menu 00 is done playing and no keys were pressed.

3.7.2.5 Transfer to the Operator after Menu Play

You can program BraVo! to automatically transfer the call to the operator **at the end of the menu**. The operator extension is defined in Table 3-1 (codes *360 and *361).

BraVo! will route the call in Full Supervision, Busy Supervision or Blind Transfer mode depending on Code *351 (see Section 3.7.4).

Command: ***125 + XX + #**

Example: *125 00 #.

BraVo! automatically transfers the call to the operator at the end of Menu 00.

3.7.2.6 Transfer Direct to Mailbox

With this menu key assignment, BraVo! transfers the caller to a specific valid mailbox number. The mailbox must be defined (see Section 3.6.1).

Command: ***130 + XX + B+ Mailbox number + #**

Example: *130 01 5 152 #

Transfers the call to mailbox 152 when "5" is pressed during playback of Menu 01.

3.7.2.7 Disconnect

BraVo! can be programmed to disconnect the call at the end of the menu or as a response to the caller pressing an assignment key during menu play.

This option may or may not include a pre-recorded disconnection message: "Thank you and good-bye."

Command: ***140 + XX + B+Z+#**

where:

Z = 0; means disconnect the line with no message.

Z = 1; means disconnect the line with the above system message.

Example: *140 10 * 1 #

BraVo! plays the disconnection message and then disconnects the call at the end of Menu 10.

3.7.2.8 Voice Mail Request

This menu key assignment prompts the caller to enter the mailbox number where they wish to leave a message.

Command: ***150 + XX + B +#**

Example: *150 00 8 #

BraVo! asks for a mailbox number when the caller presses "8" during playback of Menu 00. After entering the requested mailbox number, the caller hears the mailbox greeting and can leave a message.

3.7.2.9 Voice Mail User Login

This menu key assignment is used to allow users to login and retrieve messages from their mailboxes.

Command: ***160 + XX + B + #**

Example: *160 00 9 #

BraVo! will prompt the user for their mailbox number and password when "9" is pressed during playback of Menu 00. After entering the user mailbox number and password, the mailbox owner can retrieve messages and access the user menu to perform user maintenance.

3.7.2.10 Call Transfer Firstkey

This menu key assignment allows callers to enter an extension directly from the Menu. The first key that the caller presses is recognized by BraVo! as the first digit of an extension number. In response, BraVo! automatically stops menu playback and waits for the remaining digits to be entered before transferring the call.

Firstkey transfers are programmed according to the first digit in a range of extension numbers. The number of digits in an extension is defined by code *300 in Table 3-1. Up to four different call transfer Firstkey digits can be programmed.

Command: ***170 + XX+ first digit(s) + #**

Example 1: *170 00 2 #

BraVo! waits for the rest of the extension number when "2" is pressed during playback of Menu 00. After the caller enters the rest of the extension number, BraVo! transfers the call to the extension.

Example 2: *170 00 2 4 #

Same as Example 1, except the extension number starts with 2 or 4 (for extension numbers 2xx and 4xx).

3.7.2.11 Voice Mail Firstkey

This menu key assignment transfers the call directly to a mailbox from the Menu. This feature is similar to Call Transfer Firstkey, except the call is transferred directly to a mailbox rather than an extension. Up to four different voice mail Firstkey digits can be programmed.

Command: ***175 + XX + first digit(s) + #**

Example 1: *175 00 2 #

BraVo! waits for the rest of the mailbox number when "2" is pressed during playback of Menu 00. After the caller enters the rest of the mailbox number, BraVo! transfers the call to the mailbox.

Example 2: *175 00 2 4 #

Same as Example 1, except the mailbox number starts with 2 or 4.

3.7.2.12 Retry on Busy

This menu gives the caller the option to remain on hold. This command is valid only for Menus 21-22 (for the first language), 31-32 (for the second language) and 41-42 (for the third language), which are reserved as extension Busy menus.

Command: ***180 + XX + B +#**

Example: *180 21 3 #

BraVo! places the call on hold for 10 seconds before trying to transfer the call again when "3" is pressed during playback of Menu 21.

3.7.2.13 Blind Transfer to a Busy Extension

This menu transfers calls to a busy extension using blind transfers. This command is valid only for Menus 21-22 (for the first language), 31-32 (for the second language) and 41-42 (for the third language), which are reserved as the extension Busy menus.

Command: ***185 + XX + B + #**

Example: *185 21 5 #

BraVo! immediately tries to transfer the call again when "5" is pressed during playback of Menu Prompt 21.

Note: Both Place a Call on Hold and Blind Transfer to a Busy Extension are used to transfer calls to a busy extension. Place a Call on Hold retries every 10 seconds to transfer the call until the extension is available or caller hangs up. Blind Transfer to a Busy Extension transfers the call immediately and unconditionally to the busy extension. This option is used when BraVo! is connected to a PBX that incorporates In-Band DTMF signaling.

3.7.3 Reset Menu Programming to Default

This command function resets a menu or menu key (see Section 3.7.2). It does not delete the menu prompt.

Resetting a Menu

Command: ***190 + XX + #**

Example: *190 03 #

Resets Menu 03 to its default values.

Resetting a Menu Key

Command: ***190 + XX + B + #**

Example: *190 02 5 #

Resets Menu Key 5 in Menu 02 to its default value.

Default Values

- 0-9. If a caller presses a key that has not been programmed (or set to default) during playback of a menu, the BraVo! plays "Invalid entry please try again" and repeats the menu prompt.
- If the user presses the Operator Menu Key, the call is transferred to the operator extension regardless of menu programming.
- If the caller does not press a key during playback of a menu, BraVo! disconnects the call at the end of the menu.

3.7.4 Full Supervision, Busy Supervision and Blind Transfers

BraVo! can transfer to an extension using Full Supervision, Busy Supervision or Blind Transfer mode. In the Full Supervision mode, BraVo! monitors the call progress for Busy and No-Answer conditions and releases the call only upon answer. In the Busy Supervision mode, BraVo! only monitors for a Busy condition and releases to a ringing condition. In the Blind Transfer mode, BraVo! transfers the call to the extension without checking for any condition. These modes are system wide for all extensions. Only the operator extension can be different/changed.

You can configure BraVo! to detect Answer, Busy, and Do Not Disturb (DND) conditions by recognizing the DTMF codes sent by the PBX, or by analyzing Call Progress tones.

If you select In-Band supervision, you **must** define DTMF codes for Answer, Busy and Do Not Disturb conditions.

Table 3-8 Commands to Detect Answer, Busy and Do Not Disturb Conditions

OPERATION	COMMAND
Selecting In-Band code or Call Progress tone detection	***220 + X** where X = 0; Full Supervision call transfer using Call Progress tones (default) X = 1; Full Supervision call transfer using DTMF codes
Defines the In-Band code for the Answer condition	***221 + CODE**[1] **+ #**
Defines the In-Band code for the Busy condition	***222 + CODE**[1] **+ #**
Defines the In-Band code for the Do Not Disturb condition	***223 + CODE**[1] **+ #**

[1] Refers to the In-Band code to be sent by the PBX. Each code can contain up to four digits, including 0-9, *, # and A-D.

When entering a code, valid entries are:

0-9
** for *
*4 for #
*5 for A
*6 for B
*7 for C
*8 for D

If you select Call Progress tone supervision, BraVo! detects a busy tone based on the cadence settings you set using codes *371 and *372. It detects an answer when voice is recognized. BraVo! does not check for Ring-Back tone cadences.

BraVo! distinguishes between two types of transfers:

- Transfer to operator;
- Transfer to **all other** extensions.

Table 3-9 explains how to program Full Supervision, Busy Supervision and Blind Transfers to the operator's extension and to all other extensions.

Table 3-9 Commands to Program the Transfer Modes

OPERATION	COMMAND
Transfer mode to all extensions except the Operator's extension	***350 + X** where X = 0; Blind (Default) X = 1; Full Supervision X = 2; Busy Supervision
Transfer mode to the Operator's extension	***351 + X** where X = 0; Blind (Default) X = 1; Full Supervision X = 2; Busy Supervision

Refers to PBX manually valid codes. Each code can contain digits 0-9, *, #, Flash-1, Pause and Extension Number

If BraVo! detects a busy extension, it performs an Abort-a-Busy and by default plays System Prompt 96 (if the extension has a mailbox) or 103 (if the extension does not have a mailbox). Refer to Section 3.7.4.2 for information on changing the default system messages.

3.7.4.1 Detecting a No Answer from an Extension

If BraVo! does not detect an answer from the extension, it performs an Abort-a-No-Answer and by default plays System Prompt 97 (if the extension has a mailbox) or 104 (if it does not have a mailbox). Refer to Section 3.7.4.2 for information on changing the default system messages.

3.7.4.2 Changing the Busy and No Answer Menus and DND and are not User Recordable

System prompts 96, 97, 103, and 104 are default messages. The system administrator can replace the system prompts with menu prompts as follows:

- System Prompt 96 (Busy and the extension has a mailbox) can be replaced by Menu Prompt 21 in the first language, Menu Prompt 31 in the second language, and 41 in the third language.
- System Prompt 103 (Busy and the extension does not have a mailbox) can be replaced by Menu Prompt 22 in the first language, Menu Prompt 32 in the second language, and 42 in the third language.
- System Prompt 97 (No-Answer and the extension has a mailbox) can be replaced by Menu Prompt 23 in the first language, Menu Prompt 33 in the second language, and 43 in the third language.
- System Prompt 104 (No-Answer and the extension does not have a mailbox) can be replaced by Menu Prompt 24 in the first language, Menu Prompt 34 in the second language, and 44 in the third language.

Note: These Menu Prompts must first be recorded by the System Administrator.

For instructions on programming the above menu prompts, see Section 3.7.2. For instructions on recording menu prompts, see Section 3.7.1.

3.7.4.3 Do Not Disturb

From the User Menu, a mailbox owner can activate the Do Not Disturb mode. When a caller enters a Do Not Disturb (DND) extension, BraVo! plays System Prompt 121 and does not transfer the call to the extension. The system administrator can replace this message with Menu Prompt 25 in the first language, Menu Prompt 35 in the second language and Menu Prompt 45 in the third language.

3.8 Additional Features

3.8.1 Changing Passwords

BraVo! uses three types of passwords:

- System Administrator's password;
- Operator's password;
- Mailbox owner's password (see Section 5.2.2).

Passwords always contain four digits (0-9). The default for all three types of passwords is 1234.

3.8.1.1 Changing the System Administrator's Password

The system administrator can change his/her password by entering Code *900 to enter the programming mode, entering the current password, and then entering:

***600 + XXXX**

where XXXX is the new 4 digit password. Do not press * or #.

Note: The System Administrator's password cannot be disabled.

3.8.1.2 Changing the Operator's Password

The system administrator can change the operator's password by entering code *900 to enter the programming mode, entering the system administrator's password and then entering:

***601 + XXXX**

where XXXX is the new 4 digit password. Use digits 0-9 only.

To disable the operator's password, enter "0000".

3.8.1.3 Resetting the Mailbox Password

The system administrator can reset a mailbox password to its default (1234) by entering code *900 to enter the programming mode, entering the system administrator's password and then entering:

***570 + XXXX + #**

where XXXX is the mailbox number.

3.8.2 Changing the Operational Mode

The operator can change the operational mode by calling BraVo! and, during the main greeting, entering:

***8 + XXXX + Y**

where:

XXXX refers to the operator's password.

This password can be disabled. See Section 3.8.1.2.

Y = 0; Day Mode

Y = 1; Night Mode

Y = 2; Holiday Mode

Y = 3; Auto Mode

Y = 4; Break Mode

3.8.3 Select the Default Language

BraVo! can support up to three simultaneous languages. The default language is the language the BraVo! automatically uses if no other language has been selected.

***118 + Z**

where:

Z = 0 is the first language (default)

Z = 1 is the second language

Z = 2 is the third language

Note: The available languages are listed on the back panel of BraVo!

3.8.4 Playing a System Message

You can listen to any system message by entering:

***690 + Z + XXX**

where:

Z refers to the language number

Z = 0 is the first language

Z = 1 is the second language

Z = 2 is the third language

XXX is the prompt number

See Appendix C for a list of system prompts.

3.8.5 Listening to the Software Version Number

To hear the BraVo! software version number, enter *680.

3.8.6 Listening to the System Time and Date

To hear the current system date and time, enter *440.

3.8.7 Resetting the System

The system administrator can reset BraVo! to its pre-configured default settings by entering:

***654 + * + XXXX + #**

where XXX is the system administrator's password.

This removes all programming.

Note: if you plan to change BraVo! For use with a different PBX type, use this command to clear all existing settings and return to the preconfigured default settings

3.8.8 Volume Control

To adjust the volume level in BraVo enter:

***369** + **X**

where X is the desired setting (range is 0-9 with 0 being the lowest level and the default being 5).

To adjust the output level of DTMF enter:

***379 + X**

where X is the desired setting (range is 0-9 with 0 being the lowest level and the default being 5).

4. PROGRAMMING BRAVO! BY COMPUTER

This section describes how to program BraVo! using the Voicemail Utility Program (VUP). You can work with the VUP online, while the BraVo! system is running. BraVo! operation is only affected during send and receive.

The VUP enables you to perform the following maintenance operations:

- Define PBX settings
- Set BraVo!'s clock and calendar
- Create and maintain mailboxes
- Build Automated Attendant menus
- Review activity reports
- Print system settings and reports
- Define In-Band settings
- Define Notification settings
- Create and Maintain Distribution lists

Note: All changes to the system default configurations are stored in the computer's memory until you send them to the BraVo! system. We recommend that you save the new configurations in a file. Also, you must do a "read from BraVo!" to get the most current settings prior to updating the system and sending any data, or any changes that were made remotely will be overwritten. See section 4.4.

The VUP also allows you to access system files and settings:

- You can open a preloaded integration file to make additional changes or to download to BraVo!
- You can open the default configuration file.
- You can view BraVo! reports, e.g., line and memory utilization.

Note: VSR includes over 200 pre-defined PBX configuration files for easier installation.

4.1 Connecting the Computer to BraVo!

To work online, you must first connect your computer to the BraVo! system.

To connect your computer to BraVo!:

1. Remove the right side panel cover from the BraVo! unit.
2. Remove any cable attached to BraVo!'s RS-232 connector.
3. Connect one end of the RS-232 cable to one of the unused serial ports of your PC and the other end to BraVo!'s RS-232 connector.

4.2 System Requirements

Before installing the VUP, verify that your computer meets the following minimum requirements:

- PC 486 or higher
- 8 MB RAM
- 2 MB free hard disk space
- Microsoft Windows 3.1, Windows 95, Windows 98 or Windows NT

4.3 Installing the VUP

To install the VUP:

1. Exit all open applications.
2. Insert the VUP installation diskette into your floppy drive.
3. Use File Manager or Windows Explorer to locate the setup file on the VUP diskette.
4. Double-click the setup file.
5. Follow the instructions on the screen.

4.4 Starting the VUP

To start the VUP:

- Click the **VUP** icon. The VUP loads the data stored in the default configuration file and opens the main screen.

Note: If the VUP issues a warning message that it cannot open the current COM port, click OK. It has not yet been configured.

To select a COM port:

1. On the **Communication** menu, click **COM Port**.

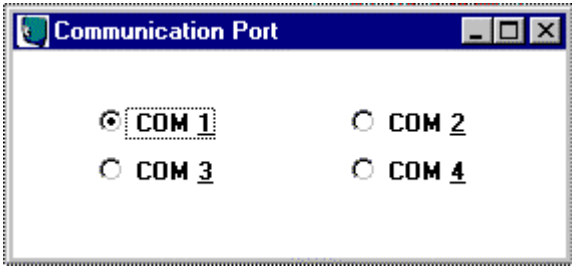


Figure 4-7 Communication Port Dialog Box

2. Click the appropriate COM port (1-4) according to your computer's configuration.

To retrieve the data stored on a BraVo!

- On the **Communication** menu, click **Read from BraVo!**

  The VUP reads the BraVo! database and overwrites the current settings in your VUP.

Note: BraVo! will not process calls during this time.

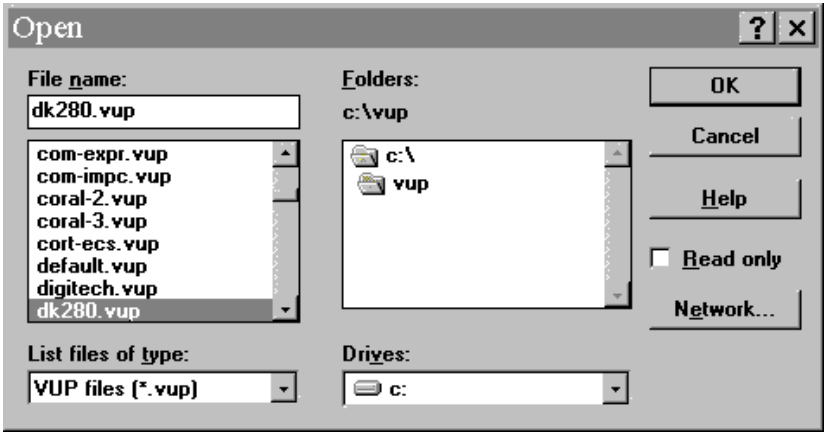
IMPORTANT: Be sure to "Read from BraVo!" before making any changes in the VUP, or your changes will be overwritten when you retrieve the data from the BraVo! system.

To load data stored in a configuration file:

1. On the **File** menu, click **Open**.
2. In the **Open** dialog box, locate the configuration file and click **OK**.

   The VUP opens the file, overwrites the current VUP settings with those stored in the file, and displays the filename on the main screen's title bar.

Note: You can save each site on your laptop by site name, e.g., VSR.VUP, ACME.VUP



To load data stored in the default configuration file:

- On the **File** menu, click **Open Default**.

  The VUP opens the default file and overwrites the current VUP settings with those stored in the default file.

Note: Overwriting the current VUP settings with those in the default file does not delete recorded messages. For information on how to delete recorded messages, see Section 3.7.1.

4.5 Defining BraVo! Settings

BraVo! settings are divided into two groups:

- PBX
- System

Defining PBX Settings

To integrate BraVo! with your PBX, you must select the appropriate PBX configuration file for your PBX. If the PBX file is not listed, check your PBX manual or the current PBX setup configuration.

For detailed information on PBX settings, see Section 3.3.

To configure the PBX settings in BraVo!:

1. On the **Settings** menu, click **PBX**. The **PBX** dialog box opens.
2. Under **Codes**, enter the Transfer, Abort a Busy and Abort a No Answer codes. You can use the following characters: 0-9, #, *, X (dial to extension), P (pause), & (Flash-1) and @ (Flash-2).

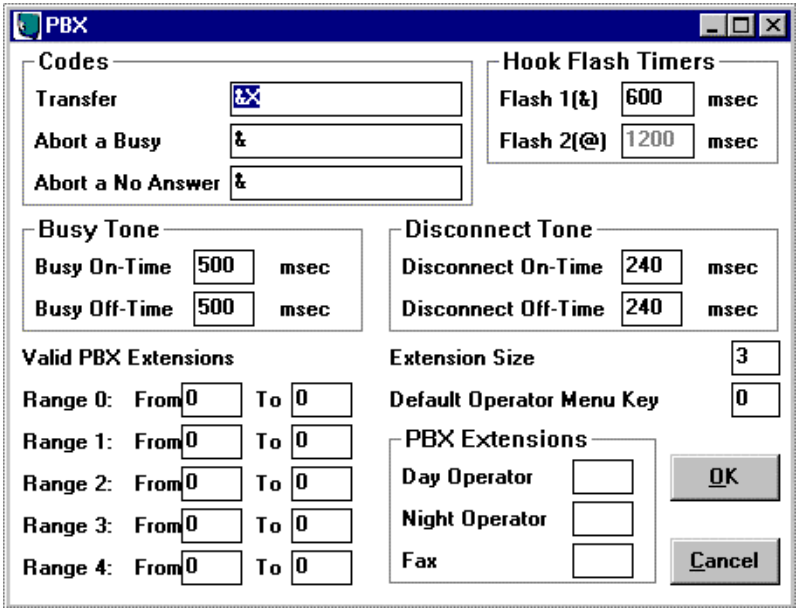


Figure 4-8 PBX Settings Dialog Box

3. Under **Hook Flash Timers**, define the flash timer in milliseconds (ms) for Flash-1. Enter a number, ranging from 000 to 980, in increments of 20 ms.

Note: Flash-2 is fixed at 1,200 ms and is only used for special programming on specific PBXs. It is not programmable.

4. Under **Busy Tone**, define the busy tone cadence by entering a number, ranging from 000 to 980 (in increments of 20 ms), in the **Busy On-Time** and **Busy Off-Time** fields. The Busy On-Time parameter defines the length of the busy tone and the Busy Off-Time specifies the amount of time between busy tones.

Note: Busy tone cadence is used for call analysis in Full Supervision mode and Busy Supervision mode. It is not used in Blind Transfer mode during Message Notification.

5. Under **Disconnect Tone**, designate the disconnect tone cadence by entering a number, ranging from 000 to 980 (in increments of 20 ms) in the **Disconnect On-Time** and **Disconnect Off-Time** fields. The Disconnect On-Time parameter defines the length of the disconnect tone and the Disconnect Off-Time specifies the amount of time between disconnect tones.

6. Under **Valid PBX Extensions**, enter a range of extension numbers to which BraVo! may transfer calls. You can define up to five groups of extension ranges with no limit to the number of extensions in each group.

Note: The number of digits in each extension defined must match the number of digits defined in step 7.

7. In the **Extension Size** field, type any number from 2 to 4. BraVo!'s Automated Attendant system will require this designated number of digits to transfer a direct call to an extension or a mailbox.

Note: All of the extensions defined under Valid PBX Extensions and all defined mailboxes must have the same number of digits as defined in the Extension Size field. The extension size cannot be changed after valid extensions or mailboxes have been defined. To change the extension size, delete all mailboxes and valid extension groups.

8. In the **Default Operator Menu Key** field, type any digit from 0 to 9. When a caller selects this digit from the Automated Attendant menus, BraVo! will transfer the call to the Operator's extension.
9. Under **PBX Extensions**, enter the extension numbers for Day Operator (Day mode), Night Operator (Break, Night or Holiday mode), and Fax. The numbers may contain up to four digits and do not have to conform to the range of valid extensions.
10. Click **OK** to save the new settings or click **Cancel**.

4.5.1 Defining System Settings

BraVo!'s system settings include the following configurations:

- Number of rings before the line is answered
- Integration type
- Codes for supervised In-Band transfers
- Transfer Mode
- Time to Wait for No Answer
- Disconnect Code
- Voice Recognition Sensitivity
- Default System Language
- Maximum Message Retention

For information on the above settings, see Section 3.3. For detailed information on transfer modes, refer to Section 3.7.4.

To define BraVo!'s System Settings:

1. On the **Settings** menu, click **System**.

The **System** dialog box opens.

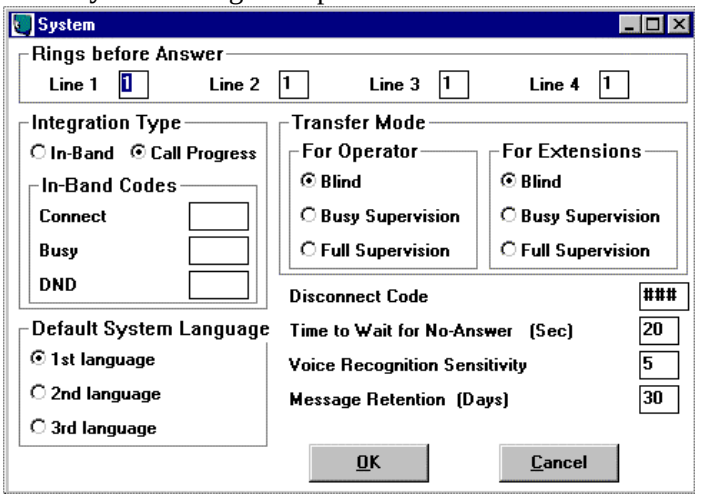


Figure 4-9 System Settings Dialog Box

2. Under **Rings Before Answer**, enter the number of rings BraVo! should allow for each line before answering. VUP accepts any number from 1 to 9.

3. Under **Integration Type**, click **Call Progress Tones** to enable BraVo! to supervise call transfer using Call Progress tones or click **In-band** to enable BraVo! to supervise call transfer using DTMF digit(s) sent by the PBX. Field default is **Call Progress Tones**.

   If you select **In-band**, you **must** enter the DTMF codes for the Connect, Busy and Do Not Disturb conditions under **In-band Codes**.

Note: Each DTMF code may contain up to four characters. Valid characters include 0-9, *, # and A-D.

   Under **Transfer Mode,** select one of the three options—**Blind, Busy Supervision, and Full Supervision**—for the operator's extension and for all other extensions.

4. Under **Default System Language**, select a language. BraVo! supports up to three languages simultaneously. If a caller does not select a language in the main menu, BraVo! will play the system prompts and error messages in the default language designated here.

The three language options are pre-programmed and loaded in this order, unless otherwise specified:

- 1st Language is English.
- 2nd Language is Spanish.
- 3rd Language is French.

6. In the **Disconnect Code** field, enter up to four digits (using *, #, 0-9, and A-D). This code represents the digits that are sent by the PBX when a call is terminated.
7. In the **Time to Wait for No-Answer** field, enter the number of seconds, ranging from 00 to 99, that BraVo! should wait before performing an Abort a No Answer operation. Field default is 20 seconds.
8. In the **Voice Recognition Sensitivity** field, enter a number (1-9) to define the volume at which BraVo! detects voice when the called extension answers. The higher the number, the higher the sensitivity to voice. This field should not need to be modified.
9. In the **Maximum Retention** field, enter the maximum number of days BraVo! should store messages in user mailboxes. BraVo! will automatically delete all messages exceeding the maximum number of storage days. The range is 1-99 and field default is 30 days.
10. Click **OK** to save the new settings or click cancel.

4.6 Programming the Voice Mail

Using the VUP, you can add, delete, and modify mailboxes to effectively meet your organization's messaging needs:

- View a list of all mailboxes
- Create new mailboxes
- Change settings of existing mailboxes
- Delete mailboxes
- Create distribution lists
- Set notification

For detailed information on BraVo!'s Voice Mail features, see Section 3.6.

4.6.1 Viewing Mailboxes

If you are working online, you can view the status of all mailboxes without interruption of service. If you are working off-line with a configuration file, you can review the status of the mailboxes configured for that file.

To view mailboxes:

- From the **Voice Mail** menu, click **Mailboxes**.
  The **Mailboxes** dialog box appears.

Figure 4-10 Mailboxes Dialog Box

4.6.2 Adding New Mailboxes

To add a new mailbox:

1. On the **Voice Mail** menu, click **Mailboxes**.

   The **Mailboxes** dialog box appears.

2. Click **Add**. The **New Mailbox** dialog box opens.

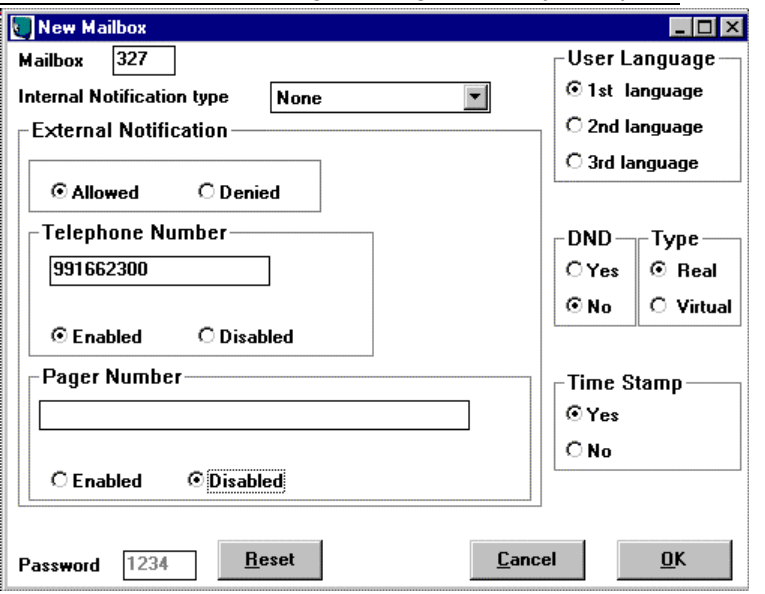


Figure 4-11 New Mailbox Dialog Box

3. In the **Mailbox** field, enter the number of the new mailbox.
4. In the **Internal Notification Type** field, select a notification type from the options list.
5. Under **External Notification**, determine the following options:
   a. Click in the **Allowed** or **Denied** field to grant or deny permission to the user for External Notification.
   b. In the **Telephone Number** field, select the **Enabled** or **Disabled** option. If enabled, enter up to 20 digits of the external telephone number (containing 0-9, A-D, *, # and P for pause) which BraVo! will dial for message notification. Do not include the access code.
   c. In the **Pager Number** field, select the **Enabled** or **Disabled** option. If enabled, enter up to 40 digits of the external telephone number (containing 0-9, A-D, *, # and P for pause) which BraVo! will dial for pager notification. **You must enter the mailbox number after the pager number. BraVo! will not dial it automatically.**

Note: For remote maintenance *1 is used for pause. Refer to page 3-3.

6. Under **User Language**, click the language that this mailbox menu should play. BraVo! supports three different languages: English, Spanish, and French. The field default is the first language, which is English.
7. Under **DND**, click **Yes** or **No** to enable or disable the Do Not Disturb mode.
8. Under **Type**, click **Real** to create a mailbox associated with an extension or **Virtual** to create a mailbox without a telephone extension.
9. Under **Time Stamp**, click **Yes** to play the time and date stamp prior to message playback or **No** to disable.
10. Click **OK** to save new settings, or click cancel.
11. A new mailbox is created, the **Add Mailbox** dialog box closes, and the new mailbox should appear on the **Mailboxes** dialog box. This mailbox is only activated after you choose to **Send to BraVo!**

Note: Maximum number of messages in a mailbox is 47, and maximum message length is 2 minutes.

4.6.2.1 Copying A Mailbox

You can add a new mailbox with the same features as an existing mailbox. The VUP will automatically assign a number that is one higher than the highest existing mailbox number to the newly copied mailbox.

By duplicating a series of mailboxes, you can create a range of mailboxes quickly and simply based on one mailbox template.

To copy a mailbox:

1. In the **Mailboxes** dialog field, highlight the mailbox you want to copy.
2. Click **Copy**.

A new mailbox is created with the same settings. The VUP automatically assigns a new number to the mailbox and lists it in the **Mailboxes** dialog field.

4.6.3 Editing the Settings of an Existing Mailbox

To change the settings of an existing mailbox:

1. In the **Mailboxes** dialog field, highlight the mailbox you want to modify.
2. Click **Edit**.

   The **Edit Mailbox** dialog box opens.
3. Change the mailbox settings as appropriate.
4. If the mailbox owner has forgotten the password, click **Reset** to restore the mailbox password to the default password (1234).
5. Click **OK** to save settings or click cancel.

   The changes to the mailbox are saved, the **Edit Mailbox** dialog box closes and the changed mailbox will reappear in the **Mailboxes** dialog field.

4.6.4 Deleting a Mailbox

To delete a mailbox:

1. In the **Mailboxes** dialog field, highlight the mailbox you want to delete.
2. Click **Delete** to remove the mailbox.
3. Repeat steps 1 and 2 until all mailboxes to be deleted have been removed from the Mailboxes dialog box.
4. Click **OK** to save settings or click cancel.

4.6.5 Creating Distribution Lists

Five distribution lists are available: you can create up to four distribution lists containing groups of up to twenty real or virtual mailboxes, in addition

to the included system wide distribution list (list 099), which includes **all** mailboxes.

Note: You can only add an existing mailbox, whether real or virtual, to a distribution list.

Each distribution list is assigned a designating list number up to three digits in length. You can select a different number for the first digit of the distribution list. Make sure that you select a number that does not interfere with your PBX's numbering plan. The default number is 0.

To create a distribution list:

1. On the **Voice Mail** menu, click **Distribution List**.

   The **Distribution List** dialog box appears.

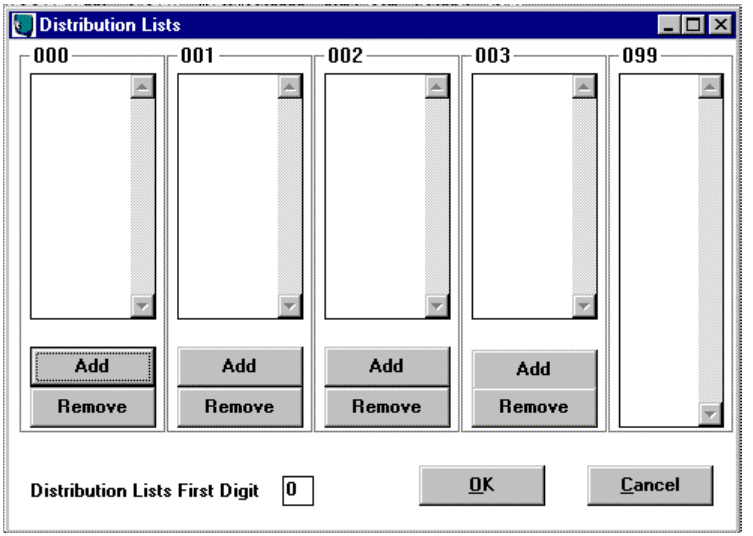


Figure 4-12 Distribution List Dialog box

2. If you want to add a mailbox to a distribution list, do the following:
   a. Click **Add** at the bottom of the specific distribution list.
   b. In the **Enter a Mailbox** dialog field, type the appropriate mailbox number and click **OK**.
3. If you want to remove a mailbox from a distribution list, select the mailbox and then click **Remove** at the bottom of the specific distribution list.
4. To change the first digit of the distribution list number, type the new number in the **Distribution Lists First Digit** field.
5. Click **OK** to save settings or click to cancel.

4.6.6 Setting Notification

Use the following codes when entering Notification settings: 0-9, #, *, P for pause, X for extension, & for Flash-1, @ for Flash-2 and A-D.

For detailed information on Notification, refer to Section 3.6.3.

To set Notification:

1. On the **Voice Mail** menu, click **Notification**.

   The **Notification** dialog box appears.

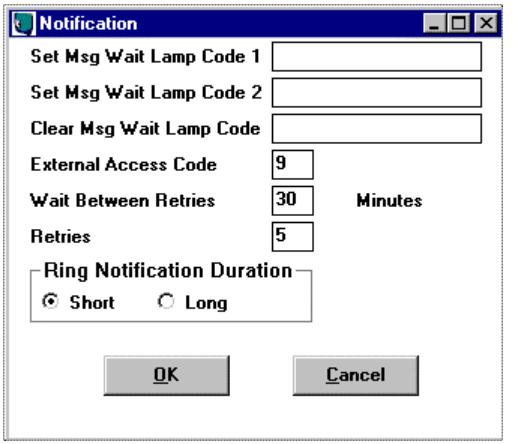


Figure 4-7 Notification Dialog Box

2. Enter the Notification settings. The External Access Code is used only for external notification and should match your PBX external access code.
3. Click **OK** to save settings or click cancel.

4.7 Programming the BraVo! Automated Attendant

BraVo! supports up to 36 menus. Prompts (00-20) are used for constructing the Automated Attendant menus. **To record menu prompts, refer to section 3.7.1.** BraVo! also supports, in three languages, another five menus (21-25 for the first language, 31-35 for the second and 41-45 for the third) for Busy, No Answer and Do Not Disturb menus (see Section 3.7).

To program a menu:

1. On the **Auto Attendant** menu, click **Menus**.

The **Auto Attendant Menu** dialog box appears.

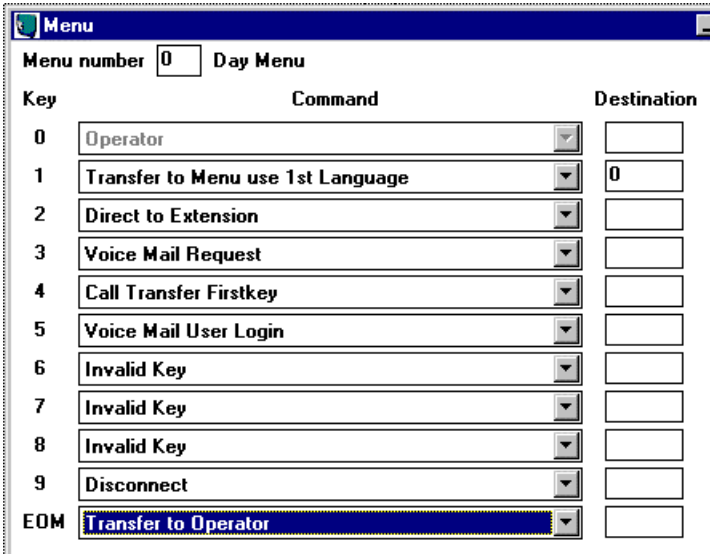


Figure 4-8 Auto Attendant Menu Dialog Box

The **Key** column contains the digit the caller can dial while the Automated Attendant plays the menu prompt. EOM (End of Message) refers to a condition in which the menu prompt reaches its end and the caller has not pressed any key.

The **Command** column describes the action BraVo! takes when the caller presses a key during a menu.

The **Destination** column defines to which extension, mailbox or submenu the call should be transferred.

2. In the **Menu Number** field, type the menu prompt number of the menu you want to program and press <**ENTER**>.

   The VUP displays past programming, if any, for the menu selected.

3. Under **Command**, click the arrow button to select an action for a corresponding menu key.

4. Under **Destination**, type the extension number, mailbox number or submenu number, if applicable, to which the call should be routed.

5. Click **OK** to save settings or cancel.

Note: Day menu = 00 Menu Prompt = 00

4.8 Setting the Schedule

The VUP enables you to schedule BraVo!'s modes of operation, and adjust the system clock and calendar using a 24-hour format.

To set the BraVo! clock and calendar:

1. On the **Auto Attendant** menu, click **Schedule**.

   The **Schedule** dialog box opens.

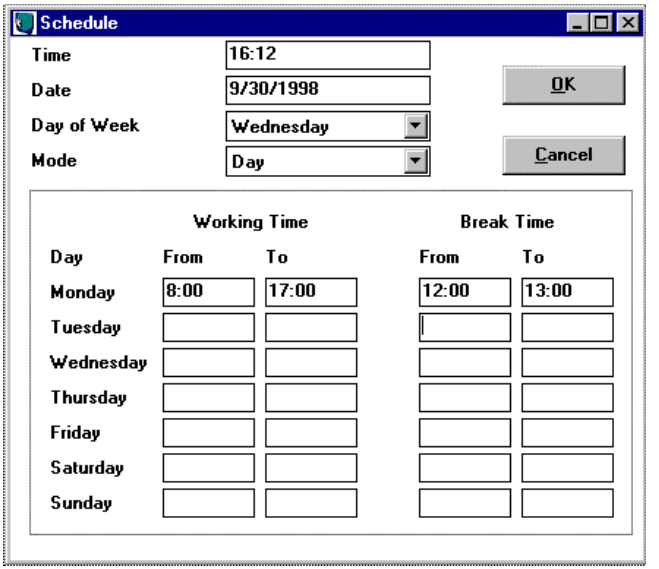


Figure 4-15 Schedule Dialog Box

2. In the **Time** field, enter the new time using 24-hour format.
3. In the **Date** field, enter the appropriate calendar date.
4. In the **Day of Week** field, select the day corresponding to the calendar date.
5. Click **OK** to save settings or click cancel.

4.9 Programming the Mode of Operation

For information on the different operational modes, see Section 3.5.

To schedule the mode:

1. On the **Auto Attendant** menu, click **Schedule**.

   The **Schedule** dialog box appears (see Figure 4-9).

2. In the **Mode** field, select an operational mode.
3. Under **Working Time**, enter the daily range of hours (in 24-hour format) that you wish to schedule for this selected operational mode.
4. If you selected the Auto mode and want to schedule a break time, enter the daily scheduled break hours under **Break Time**.
5. Click **OK** to save settings or click cancel.

4.10 Working with Configuration Files

You can program new system settings and save them as a file on your PC's hard disk or floppy disk. Then at your convenience, download the updated configuration file to BraVo!

To save the current settings as a new configuration file:

1. On the **File** menu, click **Save As**.
2. In the **Save As** dialog field, type a file name. ***EX: yoursite.VUP***
3. Click **OK** to save settings or click cancel.

To save current settings and values into an open configuration file:

- On the **File** menu, click **Save**.

Note: this permanently overwrites the previous configuration.

4.11 Sending Data to BraVo!

You can download data to BraVo! only if the VUP is online. See Section 4.1.

To download data files to BraVo!:

1. On the **Communication** menu, click **Send to BraVo!**
2. Type the System Administrator's password and press <**ENTER**>.

   If the password is correct, the data files will proceed to download from the PC to BraVo! If the password is incorrect, the VUP will issue an error message and ask you to retype the password.

Note: BraVo! will not process calls during this operation.

4.12 Viewing Reports

The VUP generates statistical information stored in the BraVo! database into the following reports:

- Report of all new and saved messages, including mailbox number, date and time of recording and status;
- Status of the flash memory, including total time available, amount of time used, amount of time remaining and percent of memory used;
- Number of languages currently supported by BraVo!;
- Number of incoming calls on each line.

To view reports:

1. On the **Communication** menu, click **Read from BraVo!**
2. On the **Reports** menu, click the specific report you want to view.
3. Click **OK** to close the report and return to the main screen.

4.13 Printing Reports

You can generate and print reports on the system settings and on statistical information stored in the BraVo! database.

To print a report:

1. On the **File** menu, point to **Print** and click **System Settings** to open the **System Settings** dialog box or **Reports** to open the **Reports** dialog box.
2. Select the appropriate check boxes.
3. Click **OK**.

   The **Output Location** dialog box appears.
4. Click **Print**.

   The **Print Setup** dialog box appears.
5. Select the appropriate printing options and click **OK**.

   BraVo! sends the report to your printer.

4.14 Saving Reports

You can generate and save reports on system configurations and statistical information stored in the BraVo! database.

To save a report:

1. On the **File** menu, point to **Print** and click **System Settings** to open the **System Settings** dialog box or **Reports** to open the **Reports** dialog field.
2. Select the appropriate check boxes.
3. Click **OK**.

   The **Output Location** dialog box opens.
4. Click **To a File**.

   The **Save As** dialog box opens.
5. Type a descriptive file name and click **OK**.

   BraVo! saves the report.

You can print the report from DOS or by using any Windows™ print utility.

4.15 Getting Help

The VUP offers online assistance for topic and option queries in two ways:

- Click **Index** on the **Help** menu to open the comprehensive help topic index.
- Highlight a text field on any dialog box and press <**F1**> to see a short explanation of the option.

4.16 Closing the VUP

To close the VUP:

- On the **File** menu, click **Exit**.

5. PROGRAMMING IN-BAND INTEGRATION

This chapter describes how to program BraVo! to detect In-Band codes sent by your PBX and to take appropriate action upon detection.

When the In-Band Integration feature is enabled, BraVo! waits a defined period of time for an In-Band code after answering a call from the PBX. If BraVo! detects an In-Band DTMF code within the specified period of time, it performs a predefined operation. If BraVo! does not detect an In-Band DTMF code within the specified period of time, it plays the Automated Attendant's Intro Menu .

After answering a call from your PBX, BraVo! plays the Intro Menu under the following conditions:

- The In-Band Integration feature is disabled.
- The DTMF codes received from the PBX do not match the programmed In-Band Codes.
- The specified extension number (Target) called does not have a valid mailbox.
- The first DTMF character of the In-Band Code was received after the specified period of time.
- The DTMF characters were received outside the specified time frame.

You can program In-Band Codes for up to ten events by:

- Touch-tone telephone
- Computer running the Voicemail Utility Program (VUP)

5.1 Programming BraVo! by Telephone

The following sections present the command codes used to program BraVo! to detect and act on In-Band DTMF codes sent by your PBX.

5.1.1 Defining an In-Band Code for an Event

To define an In-Band Code for an event, enter :

***200 + X + YY...YY + #**

where

X = Event number (0-9);

YY...YY = In-Band DTMF code sent by the PBX .

Each DTMF code can contain up to twenty characters, including 0-9, A-D, *, #. You can also include the following two wild cards to bypass DTMF characters sent by your PBX that are not relevant to BraVo!'s operation:

- Ignore (*9) + Length (two digit number). For example, wild card *906 programs BraVo! to ignore the next six DTMF characters received.
- Ignore (*0) + Seperator (one digit number). See Table 5-1 below for the following examples: Example 1: Ignore until the separator (in this case - #). Enter *0*4; Example 2: Ignore until the separator (in this case - 5). Enter *05.

Table 5-1 describes how to enter the characters comprising an In-Band Code.

Table 5-1 Entering an In-Band DTMF Code Using a Touchtone Telephone

DTMF CHARACTER	NUMBER TO ENTER
Digits 0-9	**0-9**
*****	******
#	***4**
A	***5**
B	***6**
C	***7**
D	***8**
Ignore + Length	***9 + XX** **where XX is the number of DTMF characters to ignore**

Ignore + Separator	***0 + X** **where X is the DTMF character (0-9, *, #, A-D) used as a separator**
Target	***2, indicates called extension number** ***Note: Enter *2 for each digit in the extension. For example, if your PBX is configured to support a 3-digit extension, Enter *2 three times.***

5.1.2 Selecting an Operation Type

You can program each event to perform an operation. To select an operation type, enter:

***201 + X + Y**

where

X indicates the event number (0-9);

Y indicates the operation to be performed by BraVo! according to the following options:

0 = Play the Automated Attendant's Menu

1 = Leave a message in a specific mailbox (direct to mailbox)

2 = Retrieve messages from a specific mailbox (VM user-login)

3 = Play a specific menu

4 = Play the Busy menu

5 = Play the No Answer menu

6 = Play the Do Not Disturb menu

7 = Disconnect the call

5.1.3 Selecting a Menu

If you have programmed an event to play a menu, enter the following command code to define the menu:

***202 + X + YY**

where

X = Event number (0-9);

YY = Menu number (00-25), (31-35), (41-45).

Note: Make sure the menu prompt has been recorded.

5.1.4 Changing the In-Band Integration Status

When you define an In-Band DTMF Code, BraVo! automatically enables the In-Band Integration feature. When you delete all the In-Band DTMF Codes (events), BraVo! automatically disables the In-Band Integration feature.

You can manually enable or disable the In-Band Integration feature by programming:

***203 + X**

where

X = 0; Disables the In-Band Integration feature

X = 1; Enables the In-Band Integration feature

5.1.5 Defining the Signaling Wait Period

You can define the time period BraVo! must wait between answering a call and receipt of the first character of an In-Band DTMF code. If BraVo! does not detect a DTMF character within the defined period of time, it automatically plays the Automated Attendant's Menu.

To define the timeout until the first DTMF character, Enter :

***210 + XXXX**

where

XXXX = 0000 - 9980 ms in increments of 20 ms. (The default is 1 second or 1000 milliseconds.)

5.1.6 Defining the Interdigit Wait Time

You can define the amount of time BraVo! must wait between receipt of each DTMF character comprising an In-Band code. If a DTMF character is not detected within the defined period of time and the In-Band code has not been completed, BraVo! automatically plays the Automated Attendant's Menu.

To define the amount of time to wait between DTMF characters, Enter :

***211 + XXX**

where

XXX = 000 - 980 ms in increments of 20 ms. (The default is 500 ms.)

5.2 Programming BraVo! by Computer

You can use the Voicemail Utility Program (see Chapter 4) to define up to ten In-Band DTMF Codes and related operations.

➤ **To define an In-Band DTMF Code:**

1. On the **Settings** menu, click **In-Band**.

   The **In-Band** dialog box appears.

Figure 5-1 In-Band Dialog Box

The Event field contains the event number. The In-Band Code field represents the In-Band DTMF code received from the PBX. The Operation field describes the action to be performed by BraVo! when it receives the In-Band DTMF code listed in the corresponding In-Band Code field. If an event is programmed to play a menu, the assigned menu number appears in the Menu Number field.

2. In the **In-Band Code** field, enter an In-Band DTMF Code for a corresponding event. Check your PBX manual or the current PBX setup configuration for the correct code.

   Table 5-2 describes how to translate your PBX's In-Band DTMF codes into BraVo! integration codes.

Table 5-2 Translating a PBX In-Band Code Into a BraVo! Code

DTMF CHARACTER	BRAVO! CHARACTER CODE
0-9	0-9
A-D	A-D
*	*
#	#
Target	T Note: Type T for each digit in the extension. For example, if your PBX is configured to support a 3-digit extension, enter TTT.
Ignore + Length	I + XX where XX is 00-99
Ignore + Separator	J + X where X is 0-9,A-D, * or #

3. In the **Operation** field, click the arrow button to select an action for the corresponding event.

4. If you selected **Transfer to Menu** in the **Operation** field, enter the associated menu number in the **Menu Number** field.

5. In the **Signaling Wait Period** field, enter the time BraVo! should wait between answering the call from the PBX and receipt of the first DTMF character. Option range is from 0000-9980 in increments of 20 ms. Default is 1000 ms or 1 second.

6. In the **Interdigit Wait Time** field, enter the time BraVo! should wait between receipt of each character comprising the In-Band DTMF Code. Option range is from 000-980 in increments of 20 ms.
7. Click **OK** to save new settings or click cancel.

5.3 Sample Programming

5.3.1 Working with a Digital Panasonic PBX

By default, digital Panasonic PBXs use the following DTMF characters for integration with mailboxes:

- 8 + Extension Number To leave a message in a mailbox
- 9 + Extension Number To retrieve messages from a mailbox

5.3.1.1 Programming BraVo! Using a Touchtone Telephone

➤ **To program BraVo! to detect a specific In-Band Code from the PBX and enable the caller to leave a message in a mailbox (Direct to mailbox) with a 3-digit extension number:**

1. Enter ***200 0 8 *2*2*2 #**

   Where *200 is the programming code to define an In-Band DTMF Code; 0 is the event number assigned by you to the In-Band Code;

   8 is the PBX's DTMF character that indicates leaving a message in a mailbox; *2*2*2 indicates the 3-digit extension number;

   # indicates the end of the In-Band DTMF Code.

2. Enter ***201 0 1**

   Where *201 is the programming code to select an operation;

   0 is the event number; 1 is BraVo!'s operation type that leaves a message in a mailbox.

➤ **To program BraVo! to detect a specific In-Band DTMF Code from the PBX and enable the caller to retrieve messages from a mailbox (VM user login) with a 3-digit extension number:**

1. First Enter ***200 1 9 *2*2*2 #**

   Where *200 is the programming code to define an In-Band DTMF Code; 1 is the event number assigned by you to the In-Band DTMF Code; 9 is the DTMF character that indicates retrieving messages from a mailbox; *2*2*2 indicates the 3-digit extension number;

   # indicates the end of the In-Band DTMF code.

2. Enter ***201 1 2**

   Where *201 is the programming code to select an operation

   1 is the event number 2 is BraVo!'s operation type indicating retrieving messages from a mailbox.

5.3.1.2 Programming Using a Computer (VUP)

➤ **To program BraVo! to detect a specific In-Band DTMF Code from the PBX and enable the caller to leave a message in a mailbox (direct to mailbox) with a 3-digit extension number:**

1. On the **Settings** menu, click **In-Band**.
2. The **In-Band** dialog box appears.
3. In the **In In-Band** field, enter **8TTT**.
4. In the **Operation** field , click the arrow button and select **Direct to mailbox.**
5. Click **OK** to save new settings or click cancel.

➤ **To program BraVo! to detect a specific In-Band DTMF Code from the PBX and enable the caller to retrieve messages from a mailbox (VM user login) with a 3-digit extension number:**

1. On the **Settings** menu, click **In-Band**.
2. The **In-Band** box opens.

3. In the **In-Band Code** field, enter **9TTT**.
4. In the **Operation** field, click the arrow button and select **VM User login.**
5. Click **OK** to save new settings or click cancel.

6. USER OPERATING INSTRUCTIONS

6.1 Setting Up a User Mailbox

To set up and personalize a new mailbox, the mailbox owner must log into the mailbox, then record a greeting, name, and a new password.

- **To log into a voice mailbox**

  1. Dial the voice mail access number (or press the voice mail function key).
  2. Enter the mailbox number immediately followed by a "9" to log you in as the owner of the mailbox.
  3. Enter the password. (Default is "1234")

To complete activation, follow the voice prompts in the main user menu to record a personal greeting, user name, and a new password.

6.2 Main User Menu

Whenever users log into their voice mailbox, BraVo! will first announce the number of new messages and then play the main user menu. The main user menu provides a simple guide to accessing voicemail features and options.

Main User Menu

Press 1 to retrieve messages.	**Press 5 to change transfer mode.**
Press 2 to change password.	**Press 6 to change notification.**
Press 3 to record greeting.	**Press 7 to change pager notification.**
Press 4 to record name.	**Press 8 to send a message.**
	Press 9 to return to the main menu.

6.2.1 Retrieving Messages

If the mailbox owner presses "1" at the main user menu, BraVo! plays any new messages, followed by previously saved messages. At the beginning of each message, BraVo! will announce the time and date in which the message was sent, and then offer the following options:

Press 1 to skip this message.	**Press 4 to copy.**
Press 2 to replay.	**Press 8 to delete this message.**
Press 3 to save.	**Press 9 to return to the main menu.**

6.2.2 Changing the Mailbox Password

A mailbox password consists of four digits, 0-9. The default password is "1234". To disable the password function, enter "0000".

The mailbox owner can change the password by pressing "2" at the main user menu and then entering the new password

The system administrator can reset the mailbox password to the default password by entering Code *570 or using the Voicemail Utility Program (VUP).

6.2.3 Recording a Personal Greeting

The mailbox owner can record a personal greeting by pressing "3" at the main user menu. BraVo! then plays the following submenu:

Press 1 to listen to your recording.	**Press 3 to delete.**
Press 2 to record.	

After pressing "2" to record a personal greeting, BraVo! will instruct the user to begin recording after the tone, and to press the "#" key when finished.

If a personal greeting is not recorded, but the "name" of the mailbox owner is recorded, BraVo! will automatically insert the name into the following standard greeting: "You have reached the mailbox of [*recorded name*]."

If the mailbox owner has neither recorded a personal greeting or a name, BraVo! automatically inserts the mailbox number into the following standard greeting: "You have reached mailbox number *xxx*."

6.2.4 Recording a Personal Name

The mailbox owner can record his/her name by pressing "4" on the main user menu. BraVo! then plays the following submenu:

Press 1 to listen to your recording. **Press 3 to delete.**

Press 2 to record.

6.2.5 Setting the Transfer Mode

The mailbox owner can press "5" on the main user menu to activate or deactivate the Do Not Disturb (DND) mode. BraVo! confirms the currently selected mode every time the mailbox owner changes the mode.

When DND transfer mode is activated, BraVo! plays one of the following messages and then transfers the call directly to voice mail:

- By default, System Prompt 121
- If recorded, System Prompt 25 in the first language
- If recorded, System Prompt 35 in the second language
- If recorded, System Prompt 45 in the third language

6.2.6 Changing External Notification

If permission rights for external notification have been granted by the system administrator, mailbox owners can activate, deactivate, or modify their external notification by pressing "6" at the main user menu.

The user will be prompted to press "1" to enable or disable external notification. BraVo! will then confirm that external notification has been enabled or disabled. The following options are provided:

Press 1 to edit external notification.	**Press 3 to listen to the current telephone number.**
Press 2 to enter the telephone number.	**Press 9 to return to the main menu.**

6.2.7 Changing Pager Notification

If permission rights for external notification have been granted by the system administrator, mailbox owners can activate, deactivate, or modify their pager notification by pressing "7" at the main user menu.

Note: For remote maintenance *1 is used for pause in pager notification.

The user will be prompted to press "1" to enable or disable external notification. BraVo! will then confirm that external notification has been enabled or disabled. The following options are provided:

Press 1 to edit pager notification.	**Press 3 to listen to the current pager number.**
Press 2 to enter the pager number.	**Press 9 to return to the main menu.**

6.3 Sending a Message

The mailbox owner can record and send a voicemail message to any mailbox or group of mailboxes by pressing "8" at the main user menu.

6.4 Returning to the Main Menu

The mailbox owner can return to the opening menu prompt by pressing "9" at the main user menu

6.5 Saving Messages

The mailbox owner can save messages by doing one of the following:

- Pressing “3” during playback of the user submenu to save an individual message
- Pressing “9” after hearing all the messages to save all the messages

Note: BraVo! automatically saves all unsaved messages after the user logs in and retrieves them.

6.6 Deleting Messages

The mailbox owner can delete messages by doing one of following:

- Pressing “8” during playback of the user submenu to delete an individual message
- Pressing “8” after hearing all the messages to delete all unsaved messages

BraVo! automatically deletes all messages that have exceeded the maximum number of storage days (default is 30 days). The system administrator can change the maximum number of storage days by pressing:

*740 + XX; where XX is the number of days (00-99);

--or--

By changing the Message Retention field in the VUP System Settings dialog box.

7. TROUBLESHOOTING

This Chapter presents answers to commonly asked questions about operating BraVo!

If a problem persists, contact your dealer.

Q: Lamp notification does not work.

A:

- Make sure you entered the correct message waiting lamp codes.
- Make sure that internal notification is enabled.
- Make sure that line 2 is properly connected to BraVo! and is fully operational.
- Remove all the messages from the mailbox and then send a new message.

  Note: BraVo! only signals the PBX when it places a message in an empty mailbox. The PBX then turns on the notification LED on the telephone extension.

  If an error occurred and the PBX did not receive the Set Message Wait Lamp On code, correcting the error does not turn the notification LED on. Only first emptying the mailbox and then sending a new message can turn the notification LED on.

- Add a pause between codes.

Q: External Notification does not work.

A:

- Make sure you entered the correct PBX external access code, before the external number.

- Make sure you did not add the PBX external access code to the telephone number, because BraVo! automatically dials the external access code.

- Make sure external notification is allowed and enabled.

Q: BraVo! does not transfer calls. DTMF tones are heard or the call is disconnected.

A: Flash 1 has been incorrectly configured. Check to make sure the time on BraVo! matches that on the PBX.

Q: When I dial command code *300, BraVo! plays an error message.

A: You are trying to change the number of digits in an extension after extensions and mailboxes have been configured. To change the number of digits in an extension, you must first remove all mailboxes and extensions.

Q: In Full Supervision mode, BraVo! incorrectly recalls or aborts calls.

A:

- The BraVo!'s Time to Wait for No-Answer setting is greater than the PBX's recall time setting. Decrease the value of BraVo!'s Time to Wait for No-Answer setting or increase the value of the PBX's recall time setting.

- Verify the busy cadence settings are the same as those on the PBX.

Q: In Full Supervision mode, BraVo! does not recognize answered calls.

A: Increase the Voice Recognition Sensitivity setting value. Make sure that the correct Transfer Mode has been selected.

Q: BraVo! transfers calls from a dialed extension to its associated mailbox and plays a message stating that the call could not be completed.

A: The extension is in DND (Do Not Disturb) mode.

Q: BraVo! plays the wrong time stamp and does not play the user messages.

A: Make sure that the Day menu prompt # 00 is recorded.

Q: The (VUP) issues a warning that the COM Port is unavailable.

A:
- Make sure that the selected COM port is not being used by another device.
- If the selected COM port was previously used by another device, shut down and restart your computer to release the port.

Q: A message is sent to a distribution list that contains five defined mailboxes but only two mailboxes receive the message.

A: The message was sent to all the mailboxes in the group but only accepted by the mailboxes that had not have the maximum number of messages. Maximum message number is 47.

Q: BraVo! has been programmed to operate in Night mode. When a call is received, it disconnects the call and switches to Day mode.

A: Make sure that the night greeting menu prompt # 10 is recorded.

Q: What happens when a mailbox and distribution list have the same extension number?

A: Messages are sent to the mailbox. In general, mailboxes have higher priority than distribution lists. Change the distribution list number.

Q: I dialed "6" on the User menu and got an error message.

A: Make sure that the external notification feature for the mailbox is allowed.

8. APPENDIX A: PROGRAMMING COMMANDS

The following table presents a summary of DTMF programming commands.

Note: The DTMF and PC columns list the sections in which the DTMF and computer programming operations are discussed in this manual.

OPERATION	COMMAND	DTMF	PC
Change the Operational Mode during the Intro Greeting	***8 + XXXX + Y** XXXX = operator's password Y = 0; Day Y = 1; Night Y = 2; Holiday Y = 3; Auto Y = 4; Break	3.8.2	4.9
Record a Menu Prompt	***100 + XX + Beep + Record + #**	3.7.1	N/A
Playback a Menu Prompt	***101 + XX**	3.7.1	N/A
Delete a Menu Prompt	***102 + XX**	3.7.1	N/A
Transfer to Another Menu	***110 + XX + B + YY + #** **YY = Menu Prompt**	3.7.2.1	4.7
Return to Intro Greeting	***115 + XX + B + #**	3.7.2.2	4.7
Play Another Menu Prompt and Change the Language	***117 + XX + B + YY + Z + #** Z = 0, 1 or 2 (language number)	3.7.2.3	4.7
Select Default Language	***118 + Z** Z = 0, 1 or 2 (language number)	3.8.3	4.5.2
Transfer Direct to Extension	***120 + XX + B+ Extension +#**	3.7.2.4	4.7
Transfer to an Operator at the End of the Menu Prompt	***125 + XX + #**	3.7.2.5	4.7
Transfer Direct to a Mailbox	***130 + XX + B + Mailbox + #**	3.7.2.6	4.7

OPERATION	COMMAND	DTMF	PC
Disconnect and play prompt	***140 + XX + B +Z +#** Z = 0; no message Z = 1; with message	3.7.2.7	4.7
Voice Mail Request	***150 + XX + B + #**	3.7.2.8	4.7
Voice Mail User Login	***160 + XX + B + #**	3.7.2.9	4.7
Call Transfer Firstkey	***170 +XX+ first digit(s) + #**	3.7.2.10	4.7
Voice Mail Firstkey	***175 + XX + first digit(s) + #**	3.7.2.11	4.7
Retry on Busy	***180 + XX + B + #**	3.7.2.12	N/A
Blind Transfer to Busy Extension	***185 + XX + B + #**	3.7.2.13	N/A
Reset a Menu Key	***190 + XX + B + #**	3.7.3	4.7
Reset Menu Programming to Default	***190 + XX + #**	3.7.3	4.7
Define an In-Band DTMF Code for an Event	***200 + X + YY…YY + #** X = Event number YY…YY = In-Band DTMF code	5.1.1	5.1.1
Select a Task for an In-Band DTMF Code	***201 + X + Y** X = Event number Y = Task	5.1.2	5.1.2
Select a Menu Prompt for an In-Band DTMF Code	***202 + X + YY** X = Event number YY = Menu number	5.1.3	5.1.3
Change the In-Band DTMF Status	***203 + X** X = 0; Disable Y = 1; Enable	5.1.4	5.1.4
Signaling Wait period	***210 + XXXX** XXXX = 0000-9980 in steps of 20 ms	5.1.5	5.1.5

OPERATION	COMMAND	DTMF	PC
Defining the inter digit Wait Time	***211 + XXXX** XXXX = 0000-9980 in steps of 20 ms	5.1.6	5.1.6
Select an In-Band Code for Call Progress Detection	***220 + X** X = 0; Use Call Progress Tones X = 1; Use DTMF codes	3.7.4	4.5.2
Define the In-Band Code for No Answer Condition	***221 + XXXX + #** XXXX = DTMF code	3.7.4	4.5.2
Define the In-Band Code for Busy Condition	***222 + XXXX + #** XXXX = DTMF code	3.7.4	4.5.2
Define the In-Band Code for Do Not Disturb Condition	***223 + XXXX + #** XXXX = DTMF code	3.7.4	4.5.2
Extension Size	***300 + X extension size**	3.3	4.5.1
Number of Rings before Answered	***310 + line number + number of rings**	3.3	4.5.1
Time to Wait for No Answer	***311 + XX (0 – 99) Full supervision only**	3.3	4.5.1
Valid PBX Extensions	***320 + Y +First Ext. + Last Ext. + #** Y = group number (0-4)	3.3	4.5.1
Default Operator Menu Key	***330 + X** X = 0-9	3.3	4.5.1
Disconnect Code	***333 + XXXX + #**	3.3	4.5.2
External Access Code	***340 + X** X = external access digit (0-9)	3.3	4.6.6
Transfer Mode for All Extensions except the Operator's Extension	***350 + X** X = 0; Non-Supervised X = 1; Supervised X = 2; Semi-Supervised	3.7.4	4.5.2

OPERATION	COMMAND	DTMF	PC
Transfer Mode for the Operator's Extension	***351 + X** X = 0; Non-Supervised X = 1; Supervised X= 2; Semi-Supervised	3.7.4	4.5.2
Day Operator Extension	***360 + extension number +_#**	3.3	4.5.1
Night Operator Extension	***361 + extension number + #**	3.3	4.5.1
Fax Extension	***362 + extension + #**	3.3	4.5.1
To cancel Fax Extension	***362 + #**	3.3	4.5.1
Flash 1	***370 + XXX**	3.3	4.5.1
Busy Off time Busy On time	***371 + XXX** ***372 + XXX**	3.3	4.5.1
Disconnect Off time Disconnect On time	***373 + XXX** ***374 + XXX**	3.3	4.5.1
Busy signal cadence check	***375+ XXXX +#**	3.3	
Voice Sensitivity	***376 + X**	3.3	4.5.2
Set Message Lamp-1 code	***380 + CODE[1] + #**	3.3	4.6.6
Set Message Lamp-2 code	***381 + CODE[1]+ #**	3.3	4.6.6
Set Message Lamp-Off code	***382 + CODE[1] + #**	3.3	4.6.6
Transfer	***390 + CODE[1] + #**	3.3	4.5.1
Abort a Busy	***391 + CODE[1] + #**	3.3	4.5.1
Abort No-Answer	***392 + CODE[1] + #**	3.3	4.5.1
Selecting an Operational Mode	***400 + X** X = 0; Day X = 3; Auto X = 1; Night X = 4; Break X = 2; Holiday	3.5	4.9

OPERATION	COMMAND	DTMF	PC
Selecting Time Stamp Format (English only)	***410 + X**	3.5	4.6.2
Set Time and Day of the Week	***420 + Day + Hour + Minutes**	3.4	4.8
Setting the Date	***430 + Date + Month + Year**	3.4	4.8
Listen to the System Time	***440**	3.4	N/A
Set Working Auto Only Time	***450 + Day + Starting time + Ending time**	3.5	4.8
Setting Break time Auto Only	***460 + Day + Starting time + Ending time**	3.5	4.8
Create a Range of Mailboxes	***500 + First mailbox + Last mailbox + #**	3.6.1	4.6.2.1
Create one Mailbox	***501 + Mailbox + #**	3.6.1	4.6.2
Deleting a Mailbox	***510 + Mailbox Number + #**	3.6.1	4.6.4
Create a Range of Virtual Mailboxes	***520 + First mailbox + Last mailbox + #**	3.6.1	4.6.2.1
Create one Virtual Mailbox	***521 + Mailbox Number + #**	3.6.1	4.6.2
Defining whether to Play or Skip the Time & Date Stamp during Message Play Back for a Range of Mailboxes	***530 + First mailbox + Last mailbox +B + #** B = 0 = Play B = 1 = Do not play	3.6.1	4.6.2
Defining whether to Play or Skip the Time & Date Stamp during Message Play Back for one Mailbox	***531 + Mailbox Number + B + #** B = 0 = Play B = 1 = Do not play	3.6.1	4.6.2
Define a Language for a range of Mailboxes	***532 + First Mailbox + Last Mailbox + Z + #** where Z = 0, 1 or 2 (language number)	3.6.1	4.6.2

OPERATION	COMMAND	DTMF	PC
Define a Language for a Mailbox	***533 + Mailbox Number + Z + #** where Z = 0, 1 or 2 (language number)	3.6.1	4.6.2, 4.6.3
Add a Mailbox to a Distribution List	***540 + List Number + Mailbox Number + #**	3.6.2	4.6.5
Change the First Digit of the Distribution List	***545 + First Digit of the List Number + #**	3.6.2	4.6.5
Delete a Mailbox from a Distribution List	***550 + List Number + Mailbox Number + #**	3.6.2	4.6.5
Resetting a List	***560 + List Number + #**	3.6.2	4.6.5
Reset Mailbox Password	***570 + Mailbox Number + #**	3.8.1.3	4.6.3
Change the System Administrator's Password	***600 + New password**	3.8.1.1	N/A
Change the Operator's Password	***601 + New password**	3.8.1.2	N/A
Resetting the System	***654 + * + XXXX + #**	3.8.7	N/A
Listen to the Software Version Number	***680**	3.8.5	N/A
Play a System Message	***690 + Z + XXX** Z = 0, 1 or 2 (language number) XXX = system message number	3.8.4	N/A
Setting Internal Notification for a Range of Mailboxes	***700 + First mailbox + Last mailbox + X + #** X = 0; Disabled X = 1; LED 1 X = 2; LED 2 X = 3; Ring Signs X = 4; Rings	3.6.3.1	4.6.2

OPERATION	COMMAND	DTMF	PC
Setting Internal Notification for one Mailbox	***701 + Mailbox + X + #** X = 0; Disabled X = 1; LED 1 X = 2; LED 2 X = 3; Ring Signs X = 4; Rings	3.6.3.1	4.6.2, 4.6.3
Permitting External Notification for a Range of Mailboxes	***710 + First mailbox + Last mailbox + Y + #** Y = 0; not permitted Y = 1; permitted	3.6.3.1	4.6.2
Permitting External Notification for one Mailbox	***711 + Mailbox + Y + #** Y = 0; not permitted Y = 1; permitted	3.6.3.1	4.6.2, 4.6.3
Wait Between Entries	***720 + XX** XX is in minutes	3.6.3.1	4.6.6
Ring Notification Duration	***730+ X** X = 0 means short ring 10 seconds X = 1 means long ring 20 seconds	3.6.3.1	4.6.6
Maximum no. of days to store a message in the system	***740 + XX** XX is number of days 00-99.	5.4	4.5.2
Retries	***750 + XX**	3.6.3.2	4.6.5

[1] Refers to PBX codes. Each code contains digits 0-9, *, #, Flash-1, Flash-2, Pause and Extension Number.
When entering a code, dial:

*0 for extension
*1 for pause
*2 for Flash-1
*3 for Flash-2
*4 for #
*5 for A
*6 for B
*7 for C
*8 for D
** for *

N/A stands for Not Applicable.

9. APPENDIX B: PROGRAMMING FORMS

The following pages include forms to help you properly setup and maintain the BRAVO! system using DTMF programming commands.

OPERATION	COMMAND	VALUE
No. of digits in an extension (size)	*300 _____	
No. of rings before the line is answered	Line 1: *310 1 _____ Line 2: *310 2 _____ Line 3: *310 3 _____ Line 4: *310 4 _____	
Time to Wait for No Answer	*311 _____	
Legal PBX Extensions	Group 1: *320 0 ___ ___ # Group 2: *320 1 ___ ___ # Group 3: *320 2 ___ ___ # Group 4: *320 3 ___ ___ # Group 5: *320 4 ___ ___ #	
Operator ID Code.	*330 _____	
Disconnect Code	*333 _____ #	
External Access Code	*340 _____	
Day Operator's Extension No.	*360 _____ #	
Night Operator's Extension No.	*361 _____ #	
Fax Extension No.	*362 _____ #	
Flash 1	*370 _____	
Busy Off Time (in ms) Busy On Time (in ms)	*371 _____ *372 _____	
Disconnect Off Time (in ms) Disconnect On Time (in ms)	*373 _____ *374 _____	
Voice Sensitivity	*376 _____	

OPERATION	COMMAND	VALUE
Message Light On 1 Code	*380 _____ #	
Message Light On 2 Code	*381 _____ #	
Message Light Off Code	*382 _____ #	
Transfer Code	*390 _____ #	
Abort a Busy Code	*391 _____ #	
Abort a No Answer Code	*392 _____ #	
Transfer mode for all extensions except the operator	*350 _____	
Transfer mode for the operator	*351 _____	
Create a range of mailboxes Create a mailbox	*500 _____ _____ # *501 _____ #	
Create a range of virtual mailboxes Create a virtual mailbox	*520 _____ _____ # *521 _____ #	
Change the first digit of the distribution list numbers	*545 __	
Add mailboxes to a distribution list	Group 000: *540 000 _____ # Group 001: *540 001 _____ # Group 002: *540 002 _____ # Group 003: *540 003 _____ #	
Maximum no. of days to store a message in the system	*740 _____	

SETTING NOTIFICATION FOR MAILBOXES

Setting Internal notification for a range of mailboxes: *700 _____ _____ ___ #

Setting Internal notification for one mailbox: *701 _____ ___ #

Setting External notification for a range of mailboxes: *710 _____ _____ ___ #

Setting External notification for one mailbox: *711 _____ ___ #

NOTIFICATION PARAMETERS

Delay between notification of Ring Signs and Rings: *720 _____

Ring time notification of Ring Signs and Rings *730 _____

SYSTEM TIME AND DATE

See Section 3.4 for information on setting the system time and date using codes *420 and *430.

SETTING THE WORKING TIME

See Section 3.5 for information on setting the following schedule using codes *450 and *460.

	Working Hours		Break Time	
Day	**Start**	**End**	**Start**	**End**
1 (Monday)	_____	_____	_____	_____
2 (Tuesday)	_____	_____	_____	_____
3 (Wednesday)	_____	_____	_____	_____
4 (Thursday)	_____	_____	_____	_____
5 (Friday)	_____	_____	_____	_____
6 (Saturday)	_____	_____	_____	_____
7 (Sunday)	_____	_____	_____	_____

SETTING THE **OPERATIONAL** MODE

Operational Mode: *400 __ Select: Day (0)/Night (1)/Holiday (2)/Auto (3)/Break(4)

This form contains the programming schedule for up to four Menu messages. Please copy the form if you have more than four Menu messages.

Note: The following numbers are dedicated to specific Menu messages:

- *Menu message number 00 to the Day Mode Opening Menu*
- *Menu message number 10 to the Night Mode Opening Menu*
- *Menu message number 15 to the Break Time Opening Menu*
- *Menu message number 20 to the Holiday Mode Opening Menu*

The rest of the Menu messages (01-09, 11-14 and 16-19) may be used in all modes without limitations.

Menu No. _____

0 _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
EOM _____

Menu No. _____

0 _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
EOM _____

Menu No. _____

0 _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
EOM _____

Menu No. _____

0 _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
EOM _____

PROGRAMMING THE IN-BAND DTMF PROTOCOL

EVENT	IN-BAND DTMF CODE	TASK/ACTION	MENU NO.
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			

COMMAND CODES USED TO PROGRAM THE IN-BAND DTMF PROTOCOL

OPERATION	COMMAND
Define an In-Band DTMF code for an event	*200 __ _____ #
Select a task for an In-Band DTMF code	*201 __ __
Select an event to pay a menu for an In-Band DTMF code	*202 __ ____
Define the time to wait for the first DTMF character in the In-Band DTMF code	*210 _____
Define the time to wait between receipt of each DTMF character in the In-Band DTMF code	*211 _____
Define Transfer Supervision Type	*220 __
Define the DTMF code for the Answer condition	*221 _____ #
Define the DTMF code for the Busy condition	*222 _____ #
Define the DTMF code for the Do Not Disturb condition	*223 _____ #

10. APPENDIX C: SYSTEM MESSAGES

This section lists the BraVo! system messages and their numbers. You can hear each of these messages in the programming mode by dialing:

*690 + language digit (0, 1 or 2) + system message number

NO.	SYSTEM MESSAGE
000	This voice mail system has not been programmed. Please refer to the installation manual for instructions. Thank you!
001	Please hang up now.
002	Please enter your password.
003	Invalid entry. Please try again.
004	Please hold.
005	Message was received on….
006	At….
007	Zero
008	o'clock
009	No

NO.	SYSTEM MESSAGE		
	NUMBERS		
010	One	024	Fifteen
011	Two	025	Sixteen
012	Three	026	Seventeen
013	Four	027	Eighteen
014	Five	028	Nineteen
015	Six	029	Twenty
016	Seven	030	Thirty
017	Eight	031	Forty
018	Nine	032	Fifty
019	Ten	033	Sixty
020	Eleven	034	Seventy
021	Twelve	035	Eighty
022	Thirteen	036	Ninety
023	Fourteen		

NO.	SYSTEM MESSAGE		
	DATES		
037	First	048	Twelfth
038	Second	049	Thirteenth
039	Third	050	Fourteenth
040	Fourth	051	Fifteenth
041	Fifth	052	Sixteenth
042	Sixth	053	Seventeenth
043	Seventh	054	Eighteenth
044	Eighth	055	Nineteenth
045	Ninth	056	Twentieth
046	Tenth	057	Thirtieth
047	Eleventh		
	MONTHS		
058	January	064	July
059	February	065	August
060	March	066	September
061	April	067	October
062	May	068	November

063 June 069 December

NO.	SYSTEM MESSAGE
070	Please leave your message after the tone.
071	You have...
072	...new messages.
073	…new message.
074	…messages.
075	Press 1 to retrieve messages, 2 to change your password, 3 to record your greeting, 4 to record your name, 5 to change the transfer mode, 6 to change external notification, 7 to change pager notification, 8 to send a message, or 9 to return to the main menu.
076	You have no messages.
077	There are no more messages.
078	Press 1 to skip this message, 2 to replay, 3 to save, 4 to copy, 8 to delete, or 9 to return to the previous menu.
079	Message saved.
080	Message deleted.
081	Please enter your new password.
082	Press 8 to delete skipped messages. Press 9 to save all messages.
083	…yesterday…
084	…today…

085 Please enter your Mailbox number.

NO.	SYSTEM MESSAGE
086	Invalid Mailbox. Please try again.
087	Incorrect password. Please try again.
088	Please record your greeting after the tone. Press the pound key when you have finished.
089	Please record your name after the tone. Press the pound key when you have finished.
090	Calls will be transferred to your extension.
091	Calls will not be transferred to your extension.
092	Please enter the mailbox number.
093	You have reached the mailbox of…
094	You have reached mailbox number…
095	Please leave a message after the tone.
096	That extension is busy. To try another extension, Press 1 followed by the extension number. Press 2 to hold, 8 to leave a message, 0 to transfer to the Operator, or 9 to return to the main menu.
097	That extension does not answer. To try another extension, Press 1 followed by the extension number. Press 2 to hold, 8 to leave a message, 0 to transfer to the Operator, or 9 to return to the main menu.
098	This mailbox is unavailable.
099	The system is busy. Please wait.

100	...a.m.

NO.	SYSTEM MESSAGE
101	…p.m.
102	You have a call.
103	That extension is busy. To try another extension, Press 1 followed by the extension number. Press 2 to continue holding, 0 to transfer to the Operator, or 9 to return to the main menu.
104	That extension does not answer. To try another extension, Press 1 followed by the extension number. Press 0 to transfer to the Operator, or 9 to return to the main menu.
105	You have reached the maximum message length. Your message will be sent.
106	Sunday
107	Monday
108	Tuesday
109	Wednesday
110	Thursday
111	Friday
112	Saturday
113	..O.. (as in 8 O'clock)
114	Pause (This is pause that will be playback when option 3 will be selected in message 130).

115	Please record your message after the tone. Press the pound key when you have finished.

NO.	SYSTEM MESSAGE
116	Press 1 to edit external notification, 2 to enter the telephone number, 3 to listen to the current telephone number, or 9 to return to the previous menu.
117	External notification is disabled.
118	External notification is enabled.
119	You have (a) new message(s). Press 1 to retrieve messages.
120	Please enter the telephone number. Press the pound key when you have finished.
121	That extension is unavailable. To try another extension, Press 1 followed by the extension number. Press 8 to leave a message, 0 to transfer to the Operator, or 9 to return to the main menu.
122	Invalid extension number. Please try again.
123	Skipped messages have been deleted.
124	Press 1 to listen to your recording, 2 to rerecord, 8 to delete, or 9 to return to the previous menu.
125	That recording does not exist.
126	The Busy On-Time is…
127	The Busy Off-Time is…
128	Press 1 to listen your password, 2 to edit, or 9 to return to the previous menu.
129	Message was received.

130	Press 1 for pager notification, 2 to enter the pager number, 3 to listen to the pager number, or 9 to return to the main menu.

NO.	SYSTEM MESSAGE
131	Pager notification is disabled.
132	Pager notification is enabled.
133	Please enter your pager number. Press the pound key when you have finished.

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